

ORIGINAL

Quincy Engineering, Incorporated

Engineering & Environmental Planning, Design and Project Delivery Services

SECOND AMENDMENT TO AGREEMENT FOR SERVICES # AGMT 04-671

THIS SECOND AMENDMENT to that Agreement for Services # AGMT 04-671 made and entered into by and between the County of El Dorado, a political subdivision of the State of California (hereinafter referred to as "County"), and Quincy Engineering, Incorporated, a corporation duly qualified to conduct business in the State of California, whose principal place of business is 3247 Ramos Circle, Sacramento, California 95827, (hereinafter referred to as "Consultant");

RECITALS

WHEREAS, Consultant has been engaged by County to provide engineering and environmental services including planning, design and project delivery services for Phase 1A and Phase 1B of the U.S. 50/Missouri Flat Road Interchange Project, including the Weber Creek bridges (hereinafter referred to as "Project"), for County's Department of Transportation pursuant to Agreement for Services # AGMT 04-671 and Amendment I to AGMT 04-671, both of which are incorporated herein and made by reference a part hereof;

WHEREAS, during the course of Consultant's work on the Project, additional funding for the inclusion of a Bicycle/Pedestrian facility became available and the Bicycle/Pedestrian facility was added to the scope of the Project;

WHEREAS, Consultant undertook additional work in the amount of \$189,112 regarding the design and preparation of the PS&E associated with the addition of the Bicycle/Pedestrian facility under the Optional Services provisions of the Agreement and pursuant to Task Order #04-671-09 issued by County on May 20, 2009 and subsequently amended on July 20, 2009;

WHEREAS, the parties hereto desire to amend Agreement for Services # AGMT 04-671 to extend the expiration date of December 31, 2010, amending **ARTICLE II, Term**;

WHEREAS, the parties hereto desire to increase the amount budgeted for Optional Services under the Agreement to replenish the funds expended under Task Order #04-671-09, as amended, in the amount of \$189,112 and to add additional funds under Optional Task #28, Technical Support on CCO's, in the amount of \$60,888 that may be required as a result of adding the Bicycle/Pedestrian facility to the scope of work, thereby increasing the not-to-exceed compensation amount for Optional Services under the Agreement by \$250,000, and to including an updated fee schedule for the extended term of the Agreement, amending **ARTICLE III, Compensation for Services**, and adding **Exhibit C-2**;

WHEREAS, the parties hereto desire to amend Agreement for Services # AGMT 04-671 to change one of County's notices recipients, amending **ARTICLE XV, Notice to Parties**;

WHEREAS, the parties hereto desire to amend Agreement for Services # AGMT 04-671 to change County's Contract Administrator, amending **ARTICLE XXV, Contract Administrator**;

NOW, THEREFORE, in consideration of the foregoing and the mutual promises and covenants hereinafter contained, County and Consultant mutually agree to amend the terms of the Agreement in this Second Amendment to Agreement for Services # AGMT 04-671, as follows:

ARTICLE II, Term of the original Agreement, as amended, is deleted in its entirety and the following Article is added in its place to read as follows:

ARTICLE II

Term: This Agreement shall become effective when fully executed by both parties hereto and shall expire upon the later of County's recordation of the Notice of Acceptance for the Project or the resolution of all construction claims, if any, associated with the Project.

ARTICLE III, Compensation for Services of the original Agreement, as amended, is deleted in its entirety and the following Article is added in its place to read as follows:

ARTICLE III

Compensation for Services:

- A. For services provided herein, including all deliverables described in the individual Tasks in Exhibits A, A-1, B, and B-1 hereto and any progress reports required under Article V herein, County agrees to pay Consultant within thirty (30) days following County receipt and approval of itemized invoice(s) detailing the services rendered.

For the purposes hereof, for the period beginning with the effective date of this Agreement and continuing until December 31, 2008, for the Tasks described in Exhibit A, as amended, modified and supplemented by Exhibit A-1, and Exhibit B, as amended, modified and supplemented by Exhibit B-1 hereto, the billing rates shall be in accordance with Exhibit C, marked Cost Proposal, as supplemented by Exhibit C-1, marked Cost Proposal for Supplemental Tasks. The hourly rates indicated on pages seven through ten of Exhibit C shall apply to the Tasks described in the Exhibits and are the hourly billing rates to be charged for work performed in the specified calendar years for this Agreement. Compensation for services performed directly by Consultant shall be made in accordance with the rates in Exhibit C hereto. An administrative fee not to exceed eight percent (8%) of Consultant's cost will be paid for subconsultant services and for other direct costs as indicated in Exhibits C and C-1.

For the period beginning January 1, 2009 and continuing through the remaining term of this Agreement, as amended, and notwithstanding any other provision in this Agreement to the contrary, the billing rates shall be in accordance with Exhibit C-2, marked, "Additional Cost Proposal for Optional Tasks and Amended Rate Schedule," incorporated herein and made by reference a part hereof.

Notwithstanding any provisions to the contrary in this Agreement, payments made to Consultant for services provided pursuant to Exhibit A, as amended, modified and supplemented by Exhibit A-1 herein, as applicable, shall not exceed the following percentages of the Base Scope of Work not-to-exceed amount as amended:

Limiting Events	Base Scope Percentage Amount*
PHASE 1A:	
<i>Topographic Mapping Submittal</i>	30%
<i>Preliminary 30% Plan Submittal</i>	50%
<i>65% Plan Submittal</i>	65%
<i>90% PS&E Submittal</i>	77%
<i>100% PS&E Submittal</i>	80%
PHASE 1B:	
<i>65% Plan Submittal</i>	90%
<i>90% PS&E Submittal</i>	98%
<i>100% PS&E Submittal</i>	100%

** Payments to Consultant will not exceed the percentages of the base scope not-to-exceed amounts listed, as amended, until after the limiting event has been delivered.*

The total amount for base scope services to be provided in accordance with Exhibit A as amended, modified and supplemented by Exhibit A-1 hereto shall not exceed \$3,282,000, as amended, inclusive of all work of subconsultants and expenses. Services shall be provided completely and shall be performed in accordance with the scope of services detailed in Exhibit A as amended modified and supplemented by Exhibit A-1 and in conformance with the provisions of this Agreement. Consultant shall not be relieved of its responsibility to complete the entire scope of work contemplated herein, even if the not-to-exceed amount of \$3,282,000 is reached, and no additional compensation will be paid for these services.

The total amount of optional services to be provided for Task Orders assigned in accordance with Article I, Scope of Services herein and in accordance with Exhibit B as amended, modified and supplemented by Exhibit B-1 herein may be up to but shall not exceed \$1,224,000, as amended, inclusive of all work of subconsultants, expenses and Task Orders. The not-to-exceed amount of each individual Task Order assigned shall not exceed the amount specified in each Task Order.

The total amount of this Agreement, including all of the services detailed in Exhibits A, A-1, B, and B-1 hereto, shall not exceed \$4,506,000, as amended inclusive of all costs, expenses and Task Orders and inclusive of all work of subconsultants.

For the entire term of this Agreement, as amended, the following provisions shall apply:

- B. Mileage Expenses: Mileage expenses, if applicable, shall be paid in accordance with County's Travel Policy (No. D-1), Section 5b, attached hereto as Exhibit D, marked "Board of Supervisors Policy," incorporated herein and made by reference a part hereof.
- C. Itemized invoices shall follow the format specified by County and shall reference this Agreement number and the appropriate Task Order number, if applicable. Copies of documentation attached to invoices shall reflect Consultant's charges for the specific services billed on those invoices. Invoices shall be mailed to County at the following address:

County of El Dorado
 Department of Transportation
 2850 Fairlane Court
 Placerville, California 95667
 Attn: Administration Division – Accounts Payable

or to such other location as County directs.

ARTICLE XV, Notice to Parties, of the original Agreement, as amended is deleted in its entirety and the following Article is added in its place to read as follows:

ARTICLE XV

Notice to Parties: All notices to be given by the parties hereto shall be in writing and served by depositing same in the United States Post Office, postage prepaid and return receipt requested. Notices to County shall be in duplicate and addressed as follows:

To County:

With a Copy to:

County of El Dorado
 Department Of Transportation
 4505 Golden Foothills Parkway
 El Dorado Hills, California 95762

County of El Dorado
 Department Of Transportation
 2850 Fairlane Court
 Placerville, California 95667

Attn.: Adam Bane,
 Supervising Civil Engineer

Attn.: Tim C. Prudhel,
 Contract Services Officer

or to such other location as County directs.

Notices to Consultant shall be addressed as follows:

Quincy Engineering, Incorporated
 3247 Ramos Circle
 Sacramento, California 95827

Attn.: Alan Glen, Project Manager

or to such other location as Consultant directs.

ARTICLE XXV, Contract Administrator, of the original Agreement, as amended is deleted in its entirety and the following Article is added in its place to read as follows:

ARTICLE XXV

Contract Administrator: The County Officer or employee with responsibility for administering this Agreement is Adam Bane, Supervising Civil Engineer, Roadway Design Division, Department of Transportation, or successor.

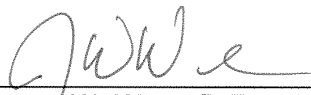
Except as herein amended, all other parts and sections of Agreement for Services # AGMT 04-671 and Amendment I to AGMT 04-671 shall remain unchanged and in full force and effect.

Contract Administrator Concurrence:

By: _____
Adam Bane,
Supervising Civil Engineer,
Roadway Design Division
Department of Transportation

Dated: _____

Requesting Department Concurrence:

By:  _____
James W. Ware, P.E.
Director of Transportation

Dated: 3/25/10

IN WITNESS WHEREOF, the parties hereto have executed this Second Amendment to Agreement for Services # AGMT 04-671 on the dates indicated below, the latest of which shall be deemed to be the effective date of this Amendment.

-- COUNTY OF EL DORADO --

By: _____ Dated: _____

Board of Supervisors
"County"

Attest:
Suzanne Allen de Sanchez
Clerk of the Board of Supervisors

By: _____ Dated: _____
Deputy Clerk

-- QUINCY ENGINEERING, INCORPORATED --

By: _____ Dated: _____
John S. Quincy
President
"Consultant"

By: _____ Dated: _____
Alan P. Glen
Corporate Secretary

Quincy Engineering, Incorporated
Exhibit C-2
Additional Cost Proposal for Optional Tasks
And
Amended Rate Schedule

Optional Tasks, Not Included in Base Budget

Part B-2 Optional Tasks Scope of Work

Quincy Engineering, Inc.

Labor and Direct Costs¹ \$250,000.00

Additional amount allocated to Task 7.1.S	\$189,112
Additional amount allocated to Task 28	60,888

¹As determined in each Task Order issued and as approved by County's Contract Administrator.

Summary of Cost Proposals for Optional Tasks:

<i>Part B Optional Tasks Cost Proposal (Exhibit C)</i>	<i>\$925,000.00</i>
<i>Part B-1 Optional Tasks Cost Proposal for Supplemental Tasks (Exhibit C-1)</i>	<i>\$49,000.00</i>
<i>Part B-2 Additional Cost Proposal for Optional Tasks (Exhibit C-2)</i>	<i>\$250,000.00</i>
<i>Amended total for Task 7.1.S</i>	<i>\$238,112</i>
<i>Amended total for Task 28</i>	<i>\$ 79,456</i>

Amended Optional Services Total: \$1,224,000.00

Amended Rate Schedule

Rates are effective January 1, 2009 through the remaining term of this Agreement

<u>Key Staff</u>	<u>Agreed Hourly Rate</u>
John Quincy, Principal in Charge	\$195
Alan Glen, Principal Engineer, Project Manager	\$195
Keith Rhodes, Senior Engineer, Roadway Project Engineer	\$155
Jim Foster, Senior Engineer, Bridge Project Engineer	\$167
Mario Quest, Senior Bridge Engineer	\$167
Mark Reno, Senior Engineer, QA/QC	\$167
Kerry Theron, Senior Construction Engineer	\$167

<u>General Classifications</u>	<u>Agreed Hourly Rate *</u>
Principal Engineer	\$195
Senior Engineer	\$167
Associate Engineer	\$132
Assistant Engineer	\$ 90
CADD Draftsman III	\$118
CADD Draftsman II	\$ 95
CADD Draftsman I	\$ 65
Administrative Assistant	\$ 95
Office Support Staff	\$ 71

* Includes Overhead and Fee

Mileage Per Exhibit D

<u>Other Direct Costs</u>	<u>Rate</u>
Office Computer & Software	Included in Overhead
Phone/Fax	Included in Overhead
Reproduction (vendor)	Cost
Delivery	Cost
Subconsultants	Cost
Misc.	Cost

Administrative Fee

Subconsultant and Other Direct Costs 8%

Quincy Engineering, Incorporated

Engineering & Environmental Planning, Design and Project Delivery Services

**AGREEMENT FOR SERVICES #AGMT 04-671
Amendment I**

THIS AMENDMENT I to that Agreement for Services # AGMT 04-671 made and entered into by and between the County of El Dorado, a political subdivision of the State of California (hereinafter referred to as "County"), and Quincy Engineering, Incorporated, a corporation duly qualified to conduct business in the State of California, whose principal place of business is 3247 Ramos Circle, Sacramento, California 95827, (hereinafter referred to as "Consultant");

RECITALS

WHEREAS, Consultant has been engaged by County to assist its Department of Transportation with engineering and environmental services including planning, design and project delivery services for Phase 1 of the proposed U.S. Highway 50/Missouri Flat Road Interchange Project, including the Weber Creek bridges pursuant to Agreement for Services #AGMT 04-671, incorporated herein and made by reference a part hereof; and

WHEREAS, the Project Development Team has determined, with Caltrans' approval, that by dividing the Phase 1 U.S. Highway 50/Missouri Flat Road Interchange Project into two phases, the critical traffic congestion relief portions of the Project could be constructed as much as twelve months ahead of schedule, and the effect of potentially delay-causing federal funding allocation changes could be mitigated; and

WHEREAS, the Project has therefore been separated into Phase 1A and Phase 1B delivery segments such that Phase 1A will make improvements to Missouri Flat Road, replace the existing bridge structure over U.S. Highway 50, make modifications to the interchange ramps, and provide the majority of the traffic congestion relief that the Project is intended to accomplish, and Phase 1B will provide additional modifications to the ramps, add auxiliary lanes to U.S. Highway 50 between Missouri Flat Road and Placerville Drive / Forni Road and make significant retrofit and safety improvements to the U.S. Highway 50 bridges over Weber Creek; and

WHEREAS, the phasing of the Project requires the production of a second set of plans, specifications, estimates and bid packages to deliver the overall Project consistent with the approved Project Report and Environmental Documents; and

WHEREAS, the parties hereto therefore desire to provide for the additional scope of work necessary to accommodate the phasing of the Project, to produce two construction packages and to provide compensation for additional project design requirements beyond the original scope of work; and

WHEREAS, the parties hereto desire to amend Agreement for Services #AGMT 04-671 to modify the scope of services amending **ARTICLE I Scope of Services and Exhibits A and B** thereto; and

WHEREAS, the parties hereto desire to amend Agreement for Services #AGMT 04-671 to increase the compensation for services by \$759,000, amending **ARTICLE III Compensation for Services** and adding **Exhibit C-1, Cost Proposal for Supplemental Tasks**; and

WHEREAS, the parties hereto desire to amend Agreement for Services #AGMT 04-671 to change the title of one of County's notices recipients, amending **ARTICLE XV Notice to Parties**; and

WHEREAS, the parties hereto desire to amend Agreement for Services #AGMT 04-671 to change the title of County's Contract Administrator, amending **ARTICLE XXV Contract Administrator**;

NOW, THEREFORE, County and Consultant mutually agree to amend the terms of the Agreement in this Amendment I to Agreement for Services #AGMT 04-671 as follows:

1. Exhibit A, entitled Base Scope of Work, is hereby amended to add, modify, and/or replace tasks of work, as further detailed in the new Exhibit A-1, entitled Supplemental Base Scope of Work. Exhibit A, and Exhibit A-1, are incorporated by reference herein as though fully set forth.
2. Exhibit B, entitled Optional Tasks Scope of Work, is hereby amended to add, modify and/or replace tasks of work, as further detailed in the new Exhibit B-1, entitled Supplemental Optional Tasks Scope of Work. Exhibit B and Exhibit B-1 are incorporated by reference herein as though fully set forth.
3. Exhibit C, entitled Cost Proposal, is hereby amended to provide additional compensation in the sum up to but not to exceed \$759,000.00, as further detailed in new Exhibit C-1, entitled Cost Proposal for Supplemental Tasks, necessary to fund the amendments, modifications and supplements to the Base Scope of Work as set forth in Exhibit A-1, and, where authorized, to fund the amended, modified and supplemented Optional Tasks Scope of Work as set forth in Exhibit B-1. Exhibit C and Exhibit C-1 are incorporated by reference herein as though fully set forth.
4. Article I, entitled Scope of Services is hereby amended to read as follows:

**ARTICLE I
Scope of Services**

- A. Consultant shall perform all professional and technical services, work, and tasks required to accomplish the objectives set forth herein, and shall provide and make available Consultant's own personnel, materials, subconsultants, vehicles and equipment necessary to perform various engineering tasks to assist DOT

staff in delivering Phases 1A and 1B of the proposed U.S. Highway 50/Missouri Flat Road Interchange project, including the Weber Creek bridges. Consultant shall perform all activities under this Agreement in accordance with federal, state and local engineering requirements and standards and all services, work, tasks and deliverables shall be consistent with and in conformance with the Project Report and Environmental Documents for the project. Services shall include engineering design; final construction contract document preparation (including plans, specifications and estimates); coordinating utility relocations, and assisting in appraising and acquiring right-of-way parcels. Specific services shall include those tasks identified in Exhibit A, marked "Base Scope of Work, as amended, modified and supplemented by Exhibit A-1.

1. County's decision to phase construction of the Project results in the following phasing scheme:

- Phase 1A - Construct the Missouri Flat Road Overcrossing, widen Missouri Flat Road, widen the Eastbound Off Ramp and realign the Westbound Off Loop and Westbound U.S. Highway 50 as an interim configuration until phase 1B is constructed.
- Phase 1B - Widen and Retrofit the Weber Creek Bridges, construct new Westbound On and Off Ramps, widen Eastbound on ramp and construct Northbound to Eastbound Bypass Ramp.

2. In addition to the phasing scheme, the following additional items are included:

- Changes to stage construction including the West Bound U.S. Highway 50 Off Ramp and Mainline U.S. Highway 50 due to project phasing.
- Reconfiguration of the Prospector's Plaza Drive Profile to increase sight distance and associated plan changes.
- Relocation of Prospector's Plaza North Driveway to accommodate stage construction traffic volumes.
- Additional signalization at Headington Road to accommodate stage construction traffic volumes.
- Additional Retaining Wall Design at Perks Court to preserve access.
- Additional Traffic Control and Construction Zone Enhanced Enforcement Program (COZEEP) patrol for geotechnical investigations.

B. In addition to the specific services identified in Exhibit A, Base Scope of Work, as amended, modified and supplemented by Exhibit A-1, entitled Supplemental Base Scope of Work, this Agreement shall also include the Optional Tasks

described in Exhibit B, marked "Optional Tasks Scope of Work," as amended and supplemented by Exhibit B-1 entitled Supplemental Optional Tasks Scope of Work. Consultant may be assigned each specific Optional Task or a portion thereof by the Contract Administrator. The specific services for each Optional Task or portion thereof shall be determined at a meeting or telephone conference between Consultant and a DOT representative to discuss the needs, applicable design standards, required deliverables, specific Consultant staff, subconsultants (if required), project-related mileage budget, and any necessary permits on a task-by-task basis. Following each meeting, Consultant shall provide DOT with a written scope of work, a schedule and a not-to-exceed cost to complete the work (Task Order), which shall require written approval, authorization, and notification to proceed from County's Contract Administrator, prior to commencement of the work. No payment will be made for any work performed before approval of the written Task Order.

The period of performance for Task Orders shall be in accordance with dates specified in each Task Order. No payment will be made for any work performed after the period of performance in the Task Order, unless County's Contract Administrator and Consultant's Project Manager amend the Task Order. No Task Order will be written which extends beyond the expiration date of this Agreement, nor the cumulative total of the not-to-exceed Contract amount.

- C. If a submittal or deliverable is required to be an electronic file, Consultant shall produce the file in Microsoft Word 2000, Microsoft Excel 2000, and other engineering software used for analytical purposes. Where Consultant produces drawings as a part of a Task, they shall be produced and submitted to County in Microstation. Upon final approval and signature of plans, Consultant shall submit final plans in Microstation and shall also convert all drawings to AutoCAD Version 2004 or latest release, and shall submit all drawings to County utilizing the latest available software technology. This effort shall not require manual alterations to drawings for the purposes of drafting modifications. Failure to submit the required deliverables in the format required shall be grounds for termination of the Agreement, as provided in Article XIV. County releases Consultant from any liability arising from modifications to electronic files made by County or its agents and for reuse of the files for any purpose other than the purpose for which the files were originally intended.
- D. County shall review and approve Consultant's progress through County's Contract Administrator, or designee, at key points hereinafter referred to as "Milestones" as appropriate. These reviews shall be performed for the specific products or deliverable referred to in the Scope of Services, in the exhibits thereto and in each Task Order. Milestones may only be changed by amendment to this Agreement. No payments shall be made to Consultant until County has determined that services of such value have been rendered and adequate progress has been made. In no event can Milestones extend beyond the termination date of this Agreement.
 1. For the purpose of specific project Milestones for Phase 1A associated with the tasks and deliverables for the Base Scope of Work, as identified

in Exhibits A, and A-1 herein, as applicable, the following Milestones and timeframes shall apply:

Milestone	Timeframe
<i>Topographic Mapping</i>	Within three (3) months from date of Notice to Proceed or delivery of survey control, electronic aerial photos and boundary surveys, whichever is later
<i>65% Plan Submittal</i>	Within twelve (12) months from date of Notice to Proceed
<i>90% PS&E Submittal</i>	Within five (5) months of County's and Caltrans' return of 65% Comments
<i>100% PS&E Submittal</i>	Within two (2) months of County's and Caltrans' return of 90% Comments

2. For the purpose of specific project Milestones for Phase 1B associated with the tasks and deliverables for the Base Scope of Work, as identified in Exhibits A and A-1, as applicable, the following Milestones and timeframes shall apply:

Milestone	Timeframe
<i>65% Plan Submittal</i>	Within twelve (12) months from date of completion of Phase 1A
<i>90% PS&E Submittal</i>	Within five (5) months of County's and Caltrans' return of 65% Comments
<i>100% PS&E Submittal</i>	Within two (2) months of County's and Caltrans' return of 90% Comments

- E. County shall cooperate with Consultant by providing the following information, where possible, in connection with this Agreement:
 1. Interface between Consultant and other County departments.
 2. Aerial Photographs for Topographic Survey
 3. Boundary Surveys
 4. Right-of-Way Engineering (Unless implemented as Optional Task)
 5. Title Reports
 6. Right-of-Way Acquisitions (Unless implemented as Optional Task)

- F. Consultant's Project Manager, or County Approved designee, shall be accessible to County's Contract Administrator, or designee, during normal County working hours and shall respond within twenty-four (24) hours to County inquiries or requests. Consultant's Project Manager shall be responsible for all matters related to Consultant's personnel, subconsultants and operations, including, but not limited to:

1. Assigning qualified personnel to perform the required Task Order work.
2. Reviewing, monitoring, training and directing Consultant's personnel and subconsultants.

All of the tasks included in this Article and in Exhibits A, A-1, B, and B-1 are the responsibility of Consultant, unless specifically described as a task or item of work to be provided by County. Consultant shall be responsible for the supervision, administration and work performed by any subconsultant for services referenced in this Article or in Exhibits A, A-1 and B, and B-1 hereto.

5. ARTICLE III, entitled Compensation for Services, is hereby amended to read:

ARTICLE III

Compensation for Services:

- A. For services provided herein, including all deliverables described in the individual Tasks in Exhibits A, A-1, B, and B-1 hereto and any progress reports required under Article V herein, County agrees to pay Consultant within thirty (30) days following County receipt and approval of itemized invoice(s) detailing services rendered. For the purposes hereof, for the Tasks described in Exhibit A, as amended, modified and supplemented by Exhibit A-1, and Exhibit B, as amended, modified and supplemented by Exhibit B-1 hereto, the billing rates shall be in accordance with Exhibit C, marked Cost Proposal, as supplemented by Exhibit C-1, marked Cost Proposal for Supplemental Tasks. The hourly rates indicated on pages seven through twelve of Exhibit C shall apply to the Tasks described in the Exhibits and are the hourly billing rates to be charged for work performed in the specified calendar years for this Agreement; rates for Task Orders that extend beyond 2008 shall be determined at the time of execution of each Task Order. Compensation for services performed directly by Consultant shall be made in accordance with the rates in Exhibit C hereto. An administrative fee not to exceed eight percent (8%) of Consultant's cost will be paid for subconsultant services and for other direct costs as indicated in Exhibits C and C-1.

Notwithstanding any provisions to the contrary in this Agreement, payments made to Consultant for services provided pursuant to Exhibit A, as amended, modified and supplemented by Exhibit A-1 herein, as applicable, shall not exceed the following percentages of the Base Scope of Work not-to-exceed amount as amended:

Limiting Events	Base Scope Percentage Amount*
PHASE 1A:	
<i>Topographic Mapping Submittal</i>	30%
<i>Preliminary 30% Plan Submittal</i>	50%
<i>65% Plan Submittal</i>	65%
<i>90% PS&E Submittal</i>	77%
<i>100% PS&E Submittal</i>	80%
PHASE 1B:	
<i>65% Plan Submittal</i>	90%
<i>90% PS&E Submittal</i>	98%
<i>100% PS&E Submittal</i>	100%

** Payments to Consultant Will Not Exceed the Percentages of the Base Scope Not-To-Exceed Amounts Listed, as amended, until after the limiting event has been delivered.*

The total amount for base scope services to be provided in accordance with Exhibit A as amended, modified and supplemented by Exhibit A-1 hereto shall not exceed \$3,282,000, as amended, inclusive of all work of subconsultants and expenses. Services shall be provided completely and shall be performed in accordance with the scope of services detailed in Exhibit A as amended modified and supplemented by Exhibit A-1 and in conformance with the provisions of this Agreement. Consultant shall not be relieved of its responsibility to complete the entire scope of work contemplated herein, even if the not-to-exceed amount of \$3,282,000 is reached, and no additional compensation will be paid for these services.

The total amount of optional services to be provided for Task Orders assigned in accordance with Article I and Exhibit B as amended, modified and supplemented by Exhibit B-1 hereto may be up to but shall not exceed \$974,000, inclusive of all work of subconsultants and expenses. The not-to-exceed amount of each individual Task Order so assigned shall not exceed the amount specified in each Task Order.

The total amount of this Agreement, including all of the services detailed in Exhibits A, A-1 and B, and B-1 hereto, shall not exceed \$4,256,000, inclusive of all work of subconsultants and expenses.

- B. Mileage Expenses: Mileage expenses, if applicable, shall be paid in accordance with County's Travel Policy (No. D-1), Section 5b, attached hereto as Exhibit D, marked "Board of Supervisors Policy," incorporated herein and made by reference a part hereof.
- C. Itemized invoices shall follow the format specified by County and shall reference this Agreement number and the appropriate Task Order number. Invoices shall be mailed to County's Project Manager at the following address:

County of El Dorado
Department of Transportation
2850 Fairlane Court
Placerville, California 95667
Attn: Adam Bane, Project Manager
or to such other location as County directs.

County may change the address to which invoices shall be sent by providing written notice designating a change of address to Consultant in accordance with the provisions of Article XV below.

6. ARTICLE XV, entitled Notice to Parties, is hereby amended to read:

ARTICLE XV

Notice to Parties: All notices to be given by the parties hereto shall be in writing

and served by depositing same in the United States Post Office, postage prepaid and return receipt requested. Notices to County shall be in duplicate and addressed as follows:

To County:

County of El Dorado
Department of Transportation
2850 Fairlane Court
Placerville, CA 95667

Attn.: Elizabeth B. Diamond, P.E.,
Deputy Director, West Slope
Engineering & Project Delivery

With a Copy To:

County of El Dorado
Department of Transportation
2850 Fairlane Court
Placerville, CA 95667

Attn.: Tim C. Prudhel,
Contract Services Officer

or to such other location as County directs.

Notices to Consultant shall be addressed as follows:

Quincy Engineering, Incorporated
3247 Ramos Circle
Sacramento, CA 95827

Attn.: Alan Glen, Project Manager

or to such other location as Consultant directs.

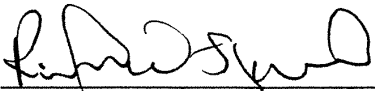
7. ARTICLE XXV, entitled Contract Administrator, is hereby amended to read:

ARTICLE XXV

Contract Administrator: The County Officer or employee with responsibility for administering this Agreement is Elizabeth B. Diamond, Deputy Director, West Slope Engineering & Project Delivery, Department of Transportation, or successor.

Except as herein amended, all other parts and sections of Agreement for Services #AGMT 04-671 shall remain unchanged and in full force and effect.

Requesting Department Concurrence:

By: 
Richard W. Shepard, P.E.
Director of Transportation

Dated: 6/20/06

IN WITNESS WHEREOF, the parties hereto have executed this Amendment I to Agreement for Services #AGMT 04-671 on the dates indicated below, the latest of which shall be deemed to be the effective date of this Amendment.

-- COUNTY OF EL DORADO --

By: James R. Sweeney
JAMES R. SWEENEY, Chairman
Board of Supervisors
"County"

Dated: 6/27/06

Attest:
Cindy Keck
Clerk of the Board of Supervisors

By: Stephan Tyler
Deputy Clerk

Dated: 6/27/06

-- QUINCY ENGINEERING, INCORPORATED --

By: John S. Quincy
John S. Quincy
President
"Consultant"

Dated: 6/21/06

By: Alan P. Glen
Alan P. Glen
Corporate Secretary

Dated: 6/21/06



QUINCY ENGINEERING, INCORPORATED

EXHIBIT A-1

SUPPLEMENTAL BASE SCOPE OF WORK

Exhibit A, entitled Base Scope of Work, is amended, modified and supplemented as follows:

DESIGN PHASE, TASK 1 – PROJECT MANAGEMENT, is hereby amended to read as follows:

TASK 1S – PROJECT MANAGEMENT

Consultant shall provide the level of effort necessary to manage and provide the delivery of two (2) sets of PS&E packages rather than one (1) package. Separate PS&E packages shall be provided for Phase 1A and for Phase 1B.

Kickoff Meeting: For a successful project, it is very important for key personnel from County, Caltrans and Consultant to thoroughly discuss the project background, scope, concepts, schedule and management, and gather all existing information about the project that has not been previously obtained.

Project Management: Communication is the key to a successful project. Consultant's management style shall be "hands on" from a coordination point of view and is a continuous activity from the scoping/negotiations phase through the final design. Consultant shall provide project management services required to deliver two (2) construction contracts rather than one. Separate construction contracts shall be provided for Phase 1A and for Phase 1B.

Project Development Team (PDT) Meetings: It is expected that PDT meetings will be held monthly during this phase. For the Phase 1A project, this scope provides for twenty-four (24) PDT meetings that will be attended by Consultant's Project Manager and Project Engineer. An additional six (6) Project Development Team meetings shall be provided for Phase 1B that will be attended by Consultant's Project Manager and Project Engineer. Subconsultants will attend PDT meetings on an as needed basis only. Consultant will work with County to schedule meetings, prepare agenda items and compile project meeting minutes for distribution.

Project Schedule: Consultant will develop separate project schedules for Phases 1A and 1B showing each task, start and end dates, and task duration. These schedules will be statused and coordinated with County's Contract Administrator, or designee. As a result of project phasing, it will be necessary to provide additional effort to maintain the project schedules for both Phases.



QUINCY ENGINEERING, INCORPORATED

EXHIBIT A-1

SUPPLEMENTAL BASE SCOPE OF WORK

Project Progress Reports: Consultant will also prepare and submit monthly progress reports for County review. These reports will include progress-to-date, schedule updates, County action items, Consultant action items, work product deliveries, problems encountered with suggested solutions and anticipated work for the next month. As a result of project phasing, Consultant shall provide progress reports for both Phase 1A and for Phase 1B.

As a means of efficiency, Consultant shall utilize the latest communications technology. Electronic copies of reports and plans will be forwarded from Consultant to County via e-mail or through Consultant's FTP site.

Task 1 Deliverables:

**Final Scope/Schedule for Phase 1A and Phase 1B
Kickoff Meeting to include Project Phasing
Project Development Team Meetings for Phase 1A and Phase 1B
Project Progress Reports for Phase 1A and Phase 1B
Schedule Statusing/Updates for Phase 1A and Phase 1B**

DESIGN PHASE, TASK 2 – PREPARE FINAL ENGINEERING REPORTS, is hereby amended to add the following additional work:

Task 2.1.2S – Bridge Foundation Investigation

In addition to the lane and shoulder closures included in the original contract scope necessary to perform geotechnical investigations, this Task shall also include additional traffic control measures necessary to close on / off ramps (with associated detours) and perform night-time lane closures at Missouri Flat Road and Weber Creek structures as required by Caltrans. This additional work shall also include CHP personnel oversight of the ramp closures and night work.

Task 2.1.2S Deliverables:

Additional traffic control measures necessary to complete work

Task 2.1.4S – Aerially Deposited Lead Testing and Specifications

This task shall include additional traffic control measures necessary to provide lane and shoulder closures along U.S. Highway 50 necessary to perform ADL sampling as required by Caltrans. This additional work shall also include CHP personnel oversight of the lane closures.



QUINCY ENGINEERING, INCORPORATED

EXHIBIT A-1

SUPPLEMENTAL BASE SCOPE OF WORK

Task 2.1.4S Deliverables:

Additional traffic control measures necessary to complete work

DESIGN PHASE, TASK 3 – PREPARE DRAFT ROADWAY PLANS, is hereby amended to read as follows:

TASK 3S – PREPARE DRAFT ROADWAY PLANS

Consultant shall provide the level of effort necessary to produce two (2) sets of Draft Roadway Plans rather than one (1) set. Separate plan sets shall be provided for Phase 1A and for Phase 1B.

In addition, at County's request, there are additional design changes being made that require additional plan sheets to be produced and some redesign effort within some of the previously counted plans. The requested changes include design of a new intersection and driveway at the north end of Prospector's Plaza, redesign of the Perk's Court cul-de-sac to a Hammerhead configuration, and redesign of Missouri Flat Road to reduce the impacts to two businesses. The Base Scope anticipated 128 roadway plan sheets being produced for the Phase 1 project.

Consultant will prepare draft roadway plans for both the Phase 1A and Phase 1B construction contracts. Preparation of the roadway plans will be done in accordance with the Caltrans *PS&E Guide* and the Caltrans *Drafting and Plans Manual*. The tables below indicate the number of plan sheets needed for each sub Phase. The anticipated number of plan sheets for each type is shown in parentheses. In addition, cross sections will be provided at Final PS&E for staking purposes and contractor information in conformance with Caltrans practices. Draft Roadway 30% Plans shall consist of project roadway typical sections, layouts, profiles and super elevation sheets.



QUINCY ENGINEERING, INCORPORATED

EXHIBIT A-1

SUPPLEMENTAL BASE SCOPE OF WORK

PHASE 1A

Route 50/Missouri Flat Road Interchange and Route 50 Widening Project (Phase 1A)	
<ul style="list-style-type: none"> ■ Title Sheet (1) ■ Typical Cross-Sections (5) ■ Key Map (1) ■ Layouts (8) ■ Profile and Superelevation (12) ■ Construction Details (15) ■ Contour Grading Plan (2) ■ Drainage Plans (8) ■ Drainage Profiles (8) ■ Drainage Details (3) 	<ul style="list-style-type: none"> ■ Drainage Quantities (4) ■ Utility Plans and Details (9) ■ Stage Construction, Traffic Handling Plans, and Detours (58) ■ Construction Area Signs (1) ■ Pavement Delineation (8) ■ Sign Plans (8) ■ Overhead Sign Plans and Details (1) ■ Summary of Quantities (6) <p>Total Anticipated Roadway Plans to be prepared by Quincy Engineering is 158</p>
<p><u>Plans to be prepared by Others:</u></p> <ul style="list-style-type: none"> ■ Signal, Lighting, Overhead Sign Lighting, Ramp metering, and Operations Systems - prepared by Fehr and Peers ■ Storm Water Pollution Prevention and Erosion Control - prepared by WRECO 	

PHASE 1B

Route 50/Missouri Flat Road Interchange and Route 50 Widening Project (Phase 1B)	
<ul style="list-style-type: none"> ■ Title Sheet (1)* ■ Typical Cross-Sections (3) ■ Key Map (1)* ■ Layouts (8) ■ Profile and Superelevation (7) ■ Construction Details (7) ■ Drainage Plans (4) ■ Drainage Profiles (2) ■ Drainage Details (1) ■ Drainage Quantities (1) 	<ul style="list-style-type: none"> ■ Utility Plans (4) ■ Stage Construction, Traffic Handling Plans, and Detours (24)* ■ Construction Area Signs (1)* ■ Pavement Delineation (8) ■ Sign Plans (8) ■ Overhead Sign Plans and Details (3) ■ Summary of Quantities (4) <p>Total Anticipated Roadway Plans to be prepared by Quincy Engineering is 87</p> <p>* These plan sheets will require limited effort to incorporate into Phase 1B, total 7 plan sheets.</p>
<p><u>Plans to be prepared by Others:</u></p> <ul style="list-style-type: none"> ■ Signal, Lighting, Overhead Sign Lighting, Ramp metering, and Operations Systems - prepared by Fehr and Peers ■ Storm Water Pollution Prevention and Erosion Control - prepared by WRECO 	



QUINCY ENGINEERING, INCORPORATED

EXHIBIT A-1

SUPPLEMENTAL BASE SCOPE OF WORK

The total Consultant roadway plan sheets needed to deliver Phase 1A and 1B is 245, an increase of 117 plan sheets over the base scope. As indicated in the table, seven (7) of the plans developed in Phase 1A can be incorporated into Phase 1B with limited effort.

Task 3S Deliverables:

Draft Roadway Plans for Phase 1A and Phase 1B PS&E (30%)

DESIGN PHASE, TASK 4 – SIGNAL, LIGHTING, OVERHEAD SIGN LIGHTING is hereby amended to add the following:

Task 4.1S – Prepare Traffic Signal Plans, Specifications, and Estimates (PS&E)

Subconsultant Fehr and Peers will provide the level of effort necessary to produce two (2) PS&E's rather than one (1). Separate PS&E's shall be provided for Phase 1A and for Phase 1B.

Subconsultant Fehr & Peers will prepare draft signal PS&E for one (1) additional modification of the existing intersection at Missouri Flat Road/Prospector's Plaza Drive as there will be different configurations during the Phase 1A and 1B projects.

Task 4.1S Deliverables:

**Second set of PS&E for Signals, Lighting & Overhead Sign Lighting:
Total of two sets; one for Phase 1A and another for Phase 1B**

Task 4.3S - Temporary Traffic Signal Design

Subconsultant Fehr & Peers will prepare PS&E for the design of eight (8) additional temporary traffic signals along Missouri Flat Road.

Subtasks necessary for this work include:

- Prepare detailed design at 1:200 metric scale for temporary signal plans;
- Submit PG&E application for temporary service points;
- Prepare cost estimates for the temporary traffic signals;
- Review by Engineer in responsible charge; and
- Submit preliminary PS&E.

Fehr and Peers will prepare the final PS&E based on comments received from Caltrans and County.



QUINCY ENGINEERING, INCORPORATED

EXHIBIT A-1

SUPPLEMENTAL BASE SCOPE OF WORK

Task 4.3S Deliverables:

PS&E for eight (8) additional temporary signals.

DESIGN PHASE, TASK 6 – STORM WATER POLLUTION PREVENTION PLANS AND EROSION CONTROL PLANS is hereby amended to add the following:

TASK 6S – STORM WATER POLLUTION PREVENTION PLANS AND EROSION CONTROL PLANS

Consultant shall provide the level of effort necessary to produce two (2) Storm Water Pollution Prevention Plans and Erosion Control Plans rather than one (1) setoff plans. Separate sets of plans shall be provided for Phase 1A and for Phase 1B.

Task 6S Deliverables:

Two sets erosion control plans: one for Phase 1A and another for Phase 1B

DESIGN PHASE, TASK 8 – SUBMITTAL OF 65% PLANS (ROADWAY AND STRUCTURES) is hereby amended to add the following:

TASK 8S – SUBMITTAL OF 65% PLANS (ROADWAY AND STRUCTURES)

Consultant shall provide the level of effort necessary to produce two (2) sets of 65% Plans (Roadway and Structures) rather than one (1) set. This supplemental task also includes additional budget for Consultant's Project Manager and Project Engineers to attend Caltrans Constructability Review Meeting during project development for two (2) Phases of the project, rather than one (1). Separate sets shall be provided for Phase 1A and for Phase 1B.

Task 8S Deliverables:

65% Plans for two PS&Es (Phase 1A and 1B)
25 sets of 11"x17" plans for each of the two phases: Phase 1A and Phase 1B
Constructability Review Meetings for two phases: Phase 1A and 1B
Progress Meetings for two phases: Phase 1A and 1B PS&E



DESIGN PHASE, TASK 9 – INDEPENDENT DESIGN CHECK, is hereby amended to add the following:

TASK 9S – INDEPENDENT DESIGN CHECK

Consultant shall provide the level of effort necessary to perform two (2) sets of Independent Design Checks as outlined in Task 9 rather than one (1) set. Separate sets shall be provided for Phase 1A and for Phase 1B.

Task 9S Deliverables:

Independent Check Calculations Signed by Registered Engineer for Phase 1A and 1B PS&E.

DESIGN PHASE, TASK 10 – UTILITY RELOCATION, is hereby amended to add the following:

TASK 10S– UTILITY RELOCATION

Consultant shall provide the level of effort necessary to provide two (2) sets of utility relocation plans and notices rather than one (1) set, and to provide for additional utility coordination necessary for two construction contract packages, Phase 1A and Phase 1B, as outlined in Task 10. Separate sets shall be provided for Phase 1A and for Phase 1B.

Task 10S Deliverables:

Utility Relocation Plans and Notices utilizing the ABC Plan Process for two phases: Phase 1A and 1B PS&E.

DESIGN PHASE, TASK 11 – TECHNICAL SPECIFICATIONS, is hereby amended to read as follows:

TASK 11S – TECHNICAL SPECIFICATIONS

Consultant shall provide the level of effort necessary to provide two (2) sets of Technical Specifications; one set for Phase 1 A and another set for Phase 1B.



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EXHIBIT A-1

SUPPLEMENTAL BASE SCOPE OF WORK

It was originally anticipated Caltrans would advertise, award and administer the construction contract for the Phase 1 project. Thus it was anticipated that Caltrans would provide the "boilerplate" specifications. Phase 1B of the project is likely to be state administered. This task is for the development of the specification package for the Phase 1A project assuming that County will administer the construction contract and for development of the Phase 1B specification package assuming that the state will administer that Phase.

Consultant will develop the bridge and roadway technical special provisions based on Caltrans *Standard Special Provisions* (SSP) to be incorporated as Sections 8, 9, and 10 of the construction special provisions. Consultant will merge the technical specifications provided by each subconsultant into a single set of technical specifications for each of the two construction contracts. Consultant will provide hard copies and disc copies of the specifications for County and Caltrans review. These files will be developed on a Windows operating system and in a file format compatible with County and Caltrans systems. County will be responsible for printing and distributing the bid documents.

Consultant will prepare the Ready to Advertise Specification Booklets based upon Caltrans boiler plate specifications and complemented by County boiler plate specifications. County will provide an electronic copy of County's standard bid package specifications in Microsoft Word format to Consultant. Consultant will merge these County boilerplate specifications into the standard Caltrans package. It is understood that the prevailing standards will be those used by Caltrans and that the packages will follow Caltrans' format to assure the final Bid Packages are approvable by Caltrans.

Task 11S Deliverables:

2 Sets of Technical Special Provisions (1 for Phase 1A and another for Phase 1B)

DESIGN PHASE, TASK 12 – CONSTRUCTION QUANTITIES AND ESTIMATE, is hereby amended to read as follows:

TASK 12S – CONSTRUCTION QUANTITIES AND ESTIMATE

Consultant shall provide the level of effort necessary to produce two (2) sets of Construction Quantities and Estimates; one set for Phase 1A and another set for Phase 1B.



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SUPPLEMENTAL BASE SCOPE OF WORK

Consultant will prepare construction quantities and construction cost estimate (Q and E. Quantities will be developed in accordance with standard Caltrans pay items in BEES (Basic Engineer's Estimating System). The Caltrans Construction Cost Database will be used to estimate item prices. Project estimates will show individual quantities and costs as well as a project cost summary, including appropriate supplemental work items and contingencies for both the Phase 1A and for Phase 1B Q and E sets.

Task 12S Deliverables:

2 sets of Quantities for PS&E Engineer's Estimate (one for Phase 1A and another for Phase 1B)

DESIGN PHASE, TASK 13 – CONSTRUCTION SCHEDULE, is hereby amended to read as follows:

TASK 13S – CONSTRUCTION SCHEDULE

Consultant shall provide the level of effort necessary to produce two (2) Construction Schedules; one schedule for Phase 1A and another for Phase 1B. Consultant will prepare two construction schedules to estimate the number of working days to be included in both the Phase 1A and Phase 1B construction contracts. The schedules will be produced using Microsoft Project, unless County or Caltrans specifies another format. The schedules will also be provided to the Resident Engineer for use during construction.

Task 13S Deliverables:

2 Construction Schedules (1 for Phase 1A and another for Phase 1B)

DESIGN PHASE, TASK 14 – QUALITY CONTROL AND CONSTRUCTIBILITY REVIEW, is hereby amended to read as follows:

TASK 14S – QUALITY CONTROL AND CONSTRUCTIBILITY REVIEW

Consultant shall provide the level of effort necessary to provide Quality Control and Constructibility Reviews for both the Phase 1 A and Phase 1B projects.

As an integral part of Consultant's QA/QC Program, a senior level engineer (acceptable to the County) will review of the entire draft PS&E (90% PS&E) packages for both the Phase 1A and Phase 1B projects for uniformity, compatibility and constructibility as well as for conformance with the Project Report.



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SUPPLEMENTAL BASE SCOPE OF WORK

The review will include comparing bridge plans with the roadway plans for conflicts or inconsistencies, and to ensure that the final design is in accordance with all environmental documents, permit requirements, hydraulics reports and foundation recommendations. The specifications and estimate will be reviewed for consistency with the plans, and to ensure that each construction item has been covered, units and terminology are consistent and to assure the product is biddable and buildable.

In addition, this Task includes attendance by the Project Manager, Roadway Project Engineer, and Bridge Project Engineer at Caltrans Safety Review Meetings and Constructibility Review Meetings for the Phase 1A and Phase 1B projects.

Task 14S Deliverables:

2 QA/QC and Constructability Reviews (1 for Phase 1A and another for Phase 1B)

DESIGN TASK 15 – DRAFT PS&E (90%) SUBMITTAL, is hereby amended to read as follows:

TASK 15S – DRAFT PS&E (90%) SUBMITTAL

Consultant shall provide the level of effort necessary to produce two (2) sets of 90% Draft PS&E packages rather than one (1) set. Separate sets shall be provided for Phase 1A and for Phase 1B.

The plans, specifications, and estimate, along with design, checks and quantity calculations will be submitted to County and Caltrans at the 90% completion stage of each Phase, Phase 1A and Phase 1B. For each Phase, Consultant will conduct a Draft PS&E adjudication meeting to review the submittal with Caltrans. Consultant will incorporate the review comments into the final PS & E packages and will provide a summary of responses to the comments for each package.

Task 15S Deliverables:

Provided at 90% PS&E for Phase 1A and Phase 1B.

Deliverables for each Phase shall consist of:

- 25 sets of 11"x17" plans (roadway and structures)
- 25 copies of draft special provisions
- 25 copies of engineer's estimate



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SUPPLEMENTAL BASE SCOPE OF WORK

Provided to Caltrans Division of Structures for the structures portion of each Phase will be:

- 5 sets of 11"x17" plans
- 2 copies of quantity and quantity check calculations
- 2 copies of special provisions
- 2 copies of engineer's estimate
- 1 copy of design calculations
- 1 copy of independent check calculations

DESIGN PHASE, TASK 16 – FINALIZE PLANS, SPECIFICATIONS, AND ESTIMATE, is hereby amended to read as follows:

TASK 16S – FINALIZE PLANS, SPECIFICATIONS, AND ESTIMATE

Consultant shall provide the level of effort necessary to finalize two (2) sets of PS&E packages rather than one (1) set, including the corresponding increase in the number of plan sheets for two phases of the project, Phase 1A and Phase 1B. Separate sets shall be provided for Phase 1A and for Phase 1B.

Consultant will finalize roadway and structure plan sheets of the Phase 1A and 1B project based upon response to meaningful comments received from the Draft PS&E submittal. Consultant will finalize the technical specifications and the quantity calculations for both the roadway and bridge plans and prepare the final BEES estimates. The final plans, specifications and estimate will be submitted to Caltrans for advertisement. The plans and specifications will be signed by a registered engineer. Full-sized (vellum) and half-sized contract plans as well as hard copy and computer files (MS Word format) of special provisions (for bidding purposes) will be provided.

Task 16S Deliverables:

For Phase 1A and Phase 1B:

- 1 Electronic file for each plan sheet in Microstation format
- 1 set (vellum) of signed 22" x 34" final plans
- 20 sets (bond) of 11"x17" final plans
- 1 electronic file formatted special provisions
- 1 Hard Copy of Final Special Provisions

DESIGN PHASE, TASK 17 – PREPARE RESIDENT ENGINEER'S FILE, is hereby amended to read as follows:

TASK 17S – PREPARE RESIDENT ENGINEER'S FILE

Consultant will prepare the Resident's Engineer's (RE) File for Phase 1A and for Phase 1B in accordance with the Caltrans *Construction Manual*. Included in this



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SUPPLEMENTAL BASE SCOPE OF WORK

file will be any notes from the designer regarding unusual or unique items and any other information of which the Resident Engineer should be made aware of.

Task 17S Deliverables:

Resident Engineer's Files for Phase 1A and for Phase 1B

DESIGN TASK 18 – PREPARE SURVEYOR'S FILE, is hereby amended to read as follows:

TASK 18S – PREPARE SURVEYOR'S FILE

Consultant will prepare for each phase, Phase 1A and Phase 1B respectively, the Surveyor's File including copies of all survey staking notes for both finished sub-grade and final roadway grade, and copies of alignments and calculations.

Task 18S Deliverables:

Surveyor's File for Phases 1A and 1B

RIGHT-OF-WAY PHASE, Task 22 - RIGHT-OF-WAY APPRAISAL AND RELATED TASKS is amended to add the following:

Task 22 - RIGHT-OF-WAY APPRAISAL AND RELATED TASKS

Due to changes in the scope of work necessitated by the phasing of the Project, and notwithstanding the specific numbers of appraisals or acquisitions for Fee Takes and Temporary Construction Easements referred to in Tasks 22.1, 22.2 and 22.3, Consultant shall provide the level of effort necessary to accomplish the objectives of those Tasks to acquire the necessary right-of-way for construction of Phase 1A and Phase 1B. The actual specific numbers of Fee Takes and Construction Easement may vary from the numbers detailed in Tasks 22.1, 22.2 and 22.3 and in the deliverables identified for those Tasks, but Consultant's and any subconsultants' levels of effort shall be commensurate with and in general conformance with the intent of the coordination, appraisal and appraisal review services contemplated under this Agreement, as amended.



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SUPPLEMENTAL BASE SCOPE OF WORK

PRECONSTRUCTION PHASE, TASK 23 – RESPOND TO BIDDERS' INQUIRIES, is amended to add the following:

TASK 23S – RESPOND TO BIDDERS' INQUIRIES

Consultant shall provide the level of effort necessary to respond to two (2) sets of Bidders' Inquiries rather than one (1) set. Separate responses shall be provided for Phase 1A and for Phase 1B. This Supplemental Task provides for up to an additional twenty (20) hours of effort for Consultant.

Task 23S Deliverables:

Responses to Bidder's Inquiries for Phase IA and 1B

PRE-CONSTRUCTION PHASE, TASK 24 – PREPARE ADDENDA, is hereby amended to add the following:

TASK 24S – PREPARE ADDENDA

Consultant shall provide the level of effort necessary to prepare addenda for two (2) sets of PS&E packages rather than one (1) set. Separate addenda shall be provided for Phase 1A and for Phase 1B. This Supplemental Task provides for up to forty (40) additional hours of effort.

Task 24S Deliverables:

Addenda, if required for Phase 1A and for Phase 1B

PRE-CONSTRUCTION PHASE, TASK 25 – AWARD RECOMMENDATION, is hereby amended to add the following:

TASK 25S – AWARD RECOMMENDATION

Consultant shall provide the level of effort necessary to review the bid results and provide two (2) award recommendations rather than one (1) award recommendation. Separate award recommendations shall be provided for Phase 1A and for Phase 1B.

Task 25S Deliverables:

Bid Analysis and Recommendation for Phase 1A and for Phase 1B



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EXHIBIT A-1

SUPPLEMENTAL BASE SCOPE OF WORK

The following new base scope of work Tasks are hereby added to the Agreement:

TASK A. SECTION 404 LETTER OF PERMISSION

To comply with Section 404 of the Clean Water Act (CWA), the project proponent is required to obtain a permit from the U.S. Army Corps of Engineers (USACE) prior to conducting activities that result in the discharge of dredged or fill material into waters of the United States (U.S.). Certain activities involving minor discharges into waters of the U.S. are authorized by Nationwide Permits (NWP). NWPs are subject to general conditions applicable to all NWPs and specific conditions applicable to the particular type of NWP. General conditions include compliance with federal laws including Section 401 of the CWA, the Endangered Species Act, and Section 106 of the National Historic Preservation Act (NHPA).

NWP 14 authorizes the discharge of fill material into waters of the U.S. for the purpose of construction or expansion of linear transportation projects as long as the discharge associated with the project does not exceed 0.5 acre of non-tidal waters of the U.S. The current set of nationwide permits is set to expire in March 2007. The grandfather provision at General Condition 27 of the nationwide permits would allow fill to continue until March 2008 as long as the project was under contract, or fill of waters had commenced by March 19, 2007. If fill into jurisdictional waters is not complete by March 2008, Consultant may request the completion of the work be authorized under the new set of nationwide permits, which may not expire until March 2012. The draft nationwide permits are scheduled for publishing in the Federal Register in Spring 2006. At that time, subconsultant Jones & Stokes will be able to assess whether the permits and/or the general conditions will change for the following five (5) years, and if so, to what extent.

Since filling waters of the United States will not be completed by March 2008, Consultant has requested that Jones & Stokes prepare a scope of work to request authorization for this project under a Section 404 Letter of Permission (LOP), which may grant it a three (3) year permit, likely with special conditions regarding mitigation. An LOP likely will not be authorized until Section 401 water quality certification is obtained and sent to USACE.

A Section 404 LOP is an Individual Permit with an abbreviated processing procedure and is used for projects where pre-application with the resource agencies has taken place. The process involves a pre-application meeting with



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SUPPLEMENTAL BASE SCOPE OF WORK

resource agencies, agency comment response from the applicant, a report addressing the 404(b)(1) guidelines and a mitigation plan to address unavoidable impacts to waters of the United States.

Task A Deliverables:

**Scope of work requesting authorization for this project
under a Section 404 Letter of Permission**

Subtask A.1 Pre-application Meeting

Subconsultant Jones & Stokes will schedule and prepare information for submittal to USACE, the U.S. Fish and Wildlife Service (USFWS), the U.S. Environmental Protection Agency (USEPA) and the California Department of Fish and Game (CDFG) to facilitate a pre-application meeting. If the project is within one (1) mile of a State bridge or culvert or within a California Department of Transportation (Caltrans) right-of-way, the applicant must contact Caltrans. Pre-application meetings with the resource agencies take place on the first Thursday of each month at the Sacramento District office of USACE.

Information must be submitted to each agency prior to that meeting, including a verified wetland delineation, a project site location and plan view of the project showing areas and acreage to be impacted, a draft report addressing the Section 404(b)(1) Guidelines and a draft conceptual mitigation plan (or banking credit).

Subtask A.1 Deliverables:

**Pre-application information preparation and submittal
Pre-application meeting representation**

Subtask A.2 Prepare Individual Permit Application Form

Jones & Stokes will complete Department of the Army ENG Form 4345. This form requires information such as project description, purpose, and location; project maps and drawings; names of adjacent landowners; and the amount of discharged material proposed. Under this task, Jones & Stokes staff will coordinate with Consultant to develop the necessary information for completion of this application form.

The application must include all information within the application and be submitted concurrently to all of the resource agencies. A record of pre-application coordination with USACE, USEPA, USFWS and CDFG must



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EXHIBIT A-1

SUPPLEMENTAL BASE SCOPE OF WORK

accompany the application. The record should include each agency's comment, and how it was addressed. The application must also include other state and local government approvals indicating that the project is consistent with those agencies' land use plans and policies.

Subtask A.2 Deliverables:

Preparation and submittal of permit applications form

Subtask A.3 Prepare Alternatives Analysis

Individual permit applications are required to include a formal alternatives analysis pursuant to the EPA Section 404(b)(1) Guidelines. Subconsultant Jones & Stokes will prepare a draft and final alternatives analysis based on the alternatives addressed in the Project EIR, as well as other information that may need to be supplied by Consultant to ensure that the alternatives in the EIR are consistent with the EPA's guidelines. To comply with EPA's requirements, the alternatives analysis must demonstrate that the proposed project is the least damaging practicable alternative that achieves the project purpose. The analysis will need to demonstrate that impacts to waters of the U.S. were avoided to the maximum extent practicable.

Subtask A.3 Deliverables:

Alternatives analysis

Subtask A.4. Assist Consultant with Response to Agency Comments

Subconsultant Jones & Stokes, in coordination with Consultant, will provide responses to comments received from the resource agencies during the interagency comment period. An excessive number of substantive comments may require a change in the scope of work and additional cost.

This scope assumes that no additional biological resources surveys will be required.

Schedule

The Letter of Permission processing procedures allow for an approximately forty-five (45) to sixty (60) day timeline. A decision on an LOP can then take an additional sixty (60) days depending on many factors, including Corps staff workloads.



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EXHIBIT A-1

SUPPLEMENTAL BASE SCOPE OF WORK

Subtask A.4 Deliverables:

Agency comment response

Task B. OBTAIN AMENDED USFWS BIOLOGICAL OPINION

Subconsultant Jones & Stokes will prepare a letter report to the USFWS that requests an amendment to the Biological Opinion for the U.S. Highway 50 (U.S. 50) / Missouri Flat Road interchange project. Critical habitat for the California red-legged frog that was designated in March 2001 was challenged in court and the designated area was repealed. The USFWS issued the Biological Opinion (BO) for the Missouri Flat project in December 2003 when critical habitat was not designated. Since the issuance of the BO, a revised critical habitat designation for the California red-legged frog was issued by the Service in April 2004. The area designated as critical habitat includes the portion of Weber Creek within the Missouri Flat project site. An amendment to the BO is required to address the designation of the critical habitat.

Assumptions:

The information provided in the letter report to the USFWS will be sufficient to issue an amended BO and that a revised Biological Assessment for the project will not be necessary.

The critical habitat designation will not result in any additional California red-legged frog mitigation for the project.

Task B Deliverables:

Consulting services defined above, to obtain amended Biological Opinion



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EXHIBIT B-1

SUPPLEMENTAL OPTIONAL TASKS SCOPE OF WORK

Exhibit B is hereby amended to add, modify and/or replace optional tasks scope of work as follows:

The following Optional Task is added:

DESIGN PHASE, TASK 7 – STRUCTURE DESIGN

Task 7.1S – Bridge Design and Detailing

This Optional Task adds services to cover the additional design effort needed to design different configurations on the Westbound and Eastbound Weber Creek Bridges resulting from the addition of future width to carry a bikelane on the Eastbound bridge. This requires separate modeling for the additional configuration. In addition, the additional width will require separate design efforts for a wider abutment, column and footing. The additional plan sheets needed to incorporate the future bikelane on the Eastbound Weber Creek bridge are as follows:

Route 50 at Weber Creek Bridge Widen & Retrofit
<ul style="list-style-type: none">■ Abutment Layout (2)■ Bent Details (1)■ -Girder Layout (1)
Total Additional Plan Sheets: 4

Task 7.1S Deliverable:

Draft Structure plans including capacity for a bikelane on the Eastbound bridge.

DESIGN PHASE, OPTIONAL Task 11.1 – Complete Specifications, is hereby amended to read as follows:

In the event that County decides to advertise, award and administer the Construction Contract for Phase 1B, this optional task would supplement Task 11 (see Exhibit A, as amended) as follows:

Consultant will prepare the Ready to Advertise Specification Booklet for Phase 1B based upon Caltrans Boiler Plate Specifications and complemented by County Boiler Plate Specifications. County will provide an electronic copy of County's standard Bid Package Specifications in Microsoft Word Format. Consultant will merge these County Boilerplate Specifications into the Standards Caltrans Package. It is understood that the prevailing standards will be Caltrans and the package will follow Caltrans format to assure the final Bid Package is



QUINCY ENGINEERING, INCORPORATED

EXHIBIT B-1

SUPPLEMENTAL OPTIONAL TASKS SCOPE OF WORK

approvable by Caltrans. Consultant will provide a hard copy and disc copy of the Bid Package for County and Caltrans review. These files will be developed on a Windows operating system and in a file format compatible with County and Caltrans. County will be responsible for printing and distributing the Bid Documents.

Task 11.1 Deliverable:

Phase 1B Bid Specification Package Ready for Advertisement

The following Optional task is added:

RIGHT-OF-WAY PHASE, TASK 22.41S – RIGHT OF WAY APPRAISAL AND ACQUISITION SERVICES

This Supplemental Optional Task adds additional appraisal and acquisition services. Task orders may be issued for additional appraisal and acquisition services as necessary, and in accordance with Article 1 B. of this Agreement.

Task 22.4S Deliverables:

Additional appraisal and/or acquisition services

Quincy Engineering, Incorporated
Exhibit C-1
Cost Proposal for Supplemental Tasks

Project Name: U.S. Highway 50/Missouri Flat Road Interchange

PS&E, R/W Acquisition, Environmental Monitoring, Construction Support
Base Budget Amendment:

Quincy Engineering, Incorporated

Direct Labor:	<i>(see page 2)</i>	\$551,018.00
Labor Escalation (6%)		\$33,061.08

QEI Labor Subtotal: **\$584,079.08**

Subconsultant Costs:

Jones and Stokes	\$13,924.00
Taber Consultants	\$13,242.00
Fehr & Peers	\$66,100.00
The Hoyt Company	\$0.00
Topographical Surveys, Inc.	\$0.00
Subtronic Corporation	\$0.00
Value Management Strategies	\$0.00
Bender Rosenthal	\$5,200.00
WRECO	<u>\$12,000.00</u>

Subconsultant Subtotal: **\$110,466.00** *(see page 2)*

Other Direct Costs:

* Mileage Estimate	\$400.00
Phone/Fax	\$200.00
Delivery	\$500.00
Printing: Blue Line	\$0.00
Vellum	\$1,000.00
8 1/2 X 11 Reproduction	\$1,000.00
11 X 17 Reproduction	\$1,000.00
Mounting Boards for Presentations	\$500.00
Miscellaneous	<u>\$1,527.44</u>

Direct Cost Subtotal: **\$6,127.44**

QEI Labor	\$584,079.08
Subconsultants & Direct Costs	\$116,593.44
Subconsultant Fee (8.0%):	<u>\$9,327.48</u>

Amendment to Base Tasks Total (Exhibit A-1 Tasks) **\$710,000.00**

Note: Invoices will be based upon QEI Agreed hourly rates for each Calendar Year; actual subconsultant and other direct costs (exclusive of mileage) will be invoiced at cost plus 8% fee.

*Mileage is an estimate only. Actual mileage expenses shall be paid in accordance with County's Travel Policy (No. D-1), Section 5b, attached hereto as Exhibit D, marked "Board of Supervisors Policy," incorporated herein and made by reference a part hereof.

Quincy Engineering, Incorporated
Exhibit C-1
Cost Proposal for Supplemental Tasks

U.S. Highway 50/Missouri Flat Road Interchange

*Engineering & Environmental Planning, Design & Project Delivery Services
Optional Tasks, Not Included in Base Budget*

Part B-1 Optional Tasks Scope of Work

Quincy Engineering, Inc.

Direct Labor:	(see page 4)	\$49,000
QEI Labor Subtotal:		\$49,000
<i>Supplemental Optional Tasks Total (Exhibit B-1 Tasks)</i>		<u>\$49,000.00</u>

Quincy Engineering, Incorporated
 Exhibit C-1
 Cost Proposal for Supplemental Tasks

Quincy Project Number: JPO 892		Project Name: U.S. Highway 50/Missouri Flat Road Interchange Project									
TASKS		MR	KT	MR	KT	MR	KT	MR	KT	MR	KT
No.	Description	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
1	Principal Engineer (Project Manager)	\$185,000	\$111,000								
2	Senior Engineer (Roadway Project Engineer)	\$132,000	\$111,000								
3	Associate Engineer	\$75,000	\$45,000								
4	Senior Bridge Engineer	\$145,000	\$145,000								
5	Senior Bridge Engineer (Project Engineer)	\$145,000	\$145,000								
6	Senior Bridge Engineer	\$145,000	\$111,000								
7	Associate Engr. (BR)	\$75,000	\$75,000								
8	Associate Engr. (BR)	\$75,000	\$75,000								
9	Assistant Engr. (BR)	\$45,000	\$45,000								
10	CADD Draftman III	\$100,000	\$100,000								
11	CADD Draftman I	\$65,000	\$65,000								
12	Senior Engineer (CC/QA)	\$140,000	\$140,000								
13	Admin	\$60,000	\$60,000								
14	Senior Engineer (Construction)	\$140,000	\$140,000								
15	Quincy Engineering Task Order (Including All Resources)	\$14,100	\$14,100								
16	Jones and Stokes	\$0	\$0								
17	Tiber Consultants	\$0	\$0								
18	Fair & Peers	\$0	\$0								
19	The Hoy Company	\$0	\$0								
20	Topographic Surveys, Inc.	\$0	\$0								
21	Subtronic Corporation	\$0	\$0								
22	Bender Rosenbalt	\$0	\$0								
23	Subtotal-Subcontractors	\$0.00	\$0.00								
24	Fee on Subcontractors (8%)	\$0.00	\$0.00								
25	Subtotal	\$0.00	\$0.00								
26	Contingency (10%)	\$0	\$0								
27	Not To Exceed Total by Task Order	\$0	\$0								
Total		\$1,100,000	\$1,100,000								

The above stated rates are based on agreed rates for Calendar Year 2005. Subsequent Year Invoices to be based upon Agreed Rate Chart for each Year.

Note: The originally budgeted amounts for Optional Services in the Agreement are sufficient to cover the estimated budget for Tasks 11, 15 and 22, 41B as indicated in Exhibit F hereto.

ORIGINAL

Quincy Engineering, Incorporated

**Engineering & Environmental Planning, Design and Project Delivery
Services**

AGREEMENT FOR SERVICES # AGMT 04-671

THIS AGREEMENT, made and entered into by and between the County of El Dorado, a political subdivision of the State of California (hereinafter referred to as "County"), and Quincy Engineering, Incorporated, a corporation duly qualified to conduct business in the State of California, whose principal place of business is 3247 Ramos Circle, Sacramento, California 95827-2512, and whose agent for service of process is John S. Quincy, 3654 Joshua Road, Shingle Springs, California 95682, (hereinafter referred to as "Consultant");

WITNESSETH

WHEREAS, County has determined that it is necessary to obtain a consultant to assist its Department of Transportation (DOT) with engineering and environmental services including planning, design and project delivery services for Phase 1 of the proposed U.S. Highway 50/Missouri Flat Road Interchange, including the Weber Creek bridges; and

WHEREAS, Consultant has represented to County that it is specially trained, experienced, expert, and competent to perform the special services required hereunder and County has determined to rely upon such representations; and

WHEREAS, it is the intent of the parties hereto that such services be in conformity with all applicable state and local laws; and

WHEREAS, County has determined that the provision of such services provided by Consultant are in the public's best interest, and authorized by El Dorado County Charter, Section 210(b)(6) and/or Government Code 31000;

NOW, THEREFORE, County and Consultant mutually agree as follows:

ARTICLE I

Scope of Services:

- A. Consultant shall perform all professional and technical services, work, and tasks required to accomplish the objectives set forth herein, and shall provide and make available Consultant's own personnel, materials, subconsultants, vehicles and equipment necessary to perform various engineering tasks to assist DOT staff in delivering Phase 1 of the proposed U.S. Highway 50/Missouri Flat Road Interchange project, including the Weber Creek bridges. Consultant shall perform all activities under this Agreement in accordance with federal, state and local engineering requirements and standards and all services, work, tasks and deliverables shall be consistent with and in conformance with the Project Report

and Environmental Documents for the project. Services shall include engineering design; final construction contract document preparation (including plans, specifications and estimates); coordinating utility relocations, and assisting in appraising and acquiring right-of-way parcels. Specific services shall include those tasks identified in Exhibit A, marked "Base Scope of Work," incorporated herein and made by reference a part hereof.

- B. In addition to the specific services identified in Exhibit A, "Base Scope of Work," this Agreement shall also include the Optional Tasks described in Exhibit B, marked "Optional Tasks Scope of Work," incorporated herein and made by reference a part hereof. Consultant may be assigned each specific Optional Task or a portion thereof by the Contract Administrator. The specific services for each Optional Task or portion thereof shall be determined at a meeting or telephone conference between Consultant and a DOT representative to discuss the needs, applicable design standards, required deliverables, specific Consultant staff, subconsultants (if required), project-related mileage budget, and any necessary permits on a task-by-task basis. Following each meeting, Consultant shall provide DOT with a scope of work, a schedule and a not-to-exceed cost to complete the work (Task Order), which shall require approval, authorization, and notification to proceed from County's Contract Administrator, prior to commencement of the work. No payment will be made for any work performed before approval of the Task Order.

The period of performance for Task Orders shall be in accordance with dates specified in each Task Order. No payment will be made for any work performed after the period of performance in the Task Order, unless County's Contract Administrator and Consultant's Project Manager amend the Task Order. No Task Order will be written which extends beyond the expiration date of this Agreement, nor the cumulative total of the not-to-exceed Contract amount.

- C. If a submittal or deliverable is required to be an electronic file, Consultant shall produce the file in Microsoft Word 2000, Microsoft Excel 2000, and other engineering software used for analytical purposes. Where Consultant produces drawings as a part of a Task, they shall be produced and submitted to County in Microstation. Upon final approval and signature of plans, Consultant shall submit final plans in Microstation and also convert all drawings to AutoCAD Version 2004 or latest release, and shall submit all drawings to County utilizing the latest available software technology. This effort shall not require manual alterations to drawings for the purposes of drafting modifications. Failure to submit the required deliverables in the format required shall be grounds for termination of the Agreement, as provided in Article XIV. County releases Consultant from any liability arising from modifications to electronic files made by County or its agents and for reuse of the files for any purpose other than the purpose for which the files were originally intended.
- D. County shall review and approve Consultant's progress through County's Contract Administrator, or designee, at key points hereinafter referred to as "Milestones" as appropriate. These reviews shall be performed for the specific products or

deliverable referred to in the Scope of Services, in the exhibits thereto and in each Task Order. Milestones may only be changed by amendment to this Agreement. No payments shall be made to Consultant until County has determined that services of such value have been rendered and adequate progress has been made. In no event can Milestones extend beyond the termination date of this Agreement.

1. For the purpose of specific project Milestones associated with the tasks and deliverables for the Base Scope of Work, as identified in Exhibit A herein, the following Milestones and timeframes shall apply:

Milestone	Timeframe
<i>Topographic Mapping</i>	Within three (3) months from date of Notice to Proceed or delivery of survey control, electronic aerial photos and boundary surveys, whichever is later
<i>65% Plan Submittal</i>	Within twelve (12) months from date of Notice to Proceed
<i>90% PS&E Submittal</i>	Within five (5) months of County's return of 65% Comments
<i>100% PS & E Submittal</i>	Within two (2) months of County's return of 90% Comments

E. County shall cooperate with Consultant by providing the following information, where possible, in connection with this Agreement:

1. Interface between Consultant and other County departments.
2. Aerial Photographs for Topographic Survey
3. Boundary Surveys
4. Right-of-Way Engineering (Unless implemented as Optional Task)
5. Title Reports
6. Right-of-Way Acquisitions (Unless implemented as Optional Task)

F. Consultant's Project Manager or County Approved designee, shall be accessible to County's Contract Administrator, or designee, during normal County working hours and shall respond within twenty-four (24) hours to County inquiries or requests. Consultant's Project Manager shall be responsible for all matters related to Consultant's personnel, subconsultants and operations, including, but not limited to:

1. Assigning qualified personnel to perform the required Task Order work.
2. Reviewing, monitoring, training and directing Consultant's personnel and subconsultants.

All of the tasks included in this Article and in Exhibits A and B hereto are the responsibility of Consultant, unless specifically described as a task or item of work to be provided by County. Consultant shall be responsible for the supervision, administration and work performed by any subconsultant for services referenced in this Article or in Exhibits A and B hereto.

ARTICLE II

Term: This Agreement shall become effective when fully executed by both parties hereto and shall expire December 31, 2010.

ARTICLE III

Compensation for Services:

- A. For services provided herein, including all deliverables described in the individual Tasks in Exhibits A and B hereto and any progress reports required under Article V herein, County agrees to pay Consultant within thirty (30) days following County receipt and approval of itemized invoice(s) detailing services rendered. For the purposes hereof, the billing rate shall be in accordance with Exhibit C, marked "Cost Proposal," incorporated herein and made by reference a part hereof. The hourly rates indicated on pages seven through twelve of Exhibit C herein are the hourly billing rates to be charged for work performed in the specified calendar years for this Agreement; rates for task orders that carry beyond 2008 shall be determined at the time of execution of said task order. Compensation for services performed directly by Consultant shall be made in accordance with the rates in Exhibit C hereto. An administrative fee not to exceed eight percent (8%) of Consultant's cost will be paid for subconsultant services and for other direct costs as indicated in Exhibit C.

Notwithstanding any provisions to the contrary in this Agreement, payments made to Consultant for services provided pursuant to Exhibit A herein shall not exceed the following percentages of the Base Scope of Work not-to-exceed amount:

Limiting Events	Base Scope Percentage Amount*
<i>Topographic Mapping Submittal</i>	30%
<i>30% Roadway Plan Submittal</i>	50%
<i>65% Plan Submittal</i>	75%
<i>90% PS&E Submittal</i>	95%
<i>100% PS & E Submittal</i>	100%

* Payments to Consultant Will Not Exceed the Percentages of the Base Scope Not-To-Exceed Amount Listed until after the limiting event has been delivered.

The total amount for services to be provided in accordance with Exhibit A hereto shall not exceed \$ 2,572,000 inclusive of all work of subconsultants and expenses. Services shall be provided completely and shall be performed in accordance with the scope of services detailed in Exhibit A and in conformance with the provisions of this Agreement. Consultant shall not be relieved of its responsibility to complete the entire scope of work contemplated herein, even if the not-to-exceed amount of \$

2,572,000 is reached, and no additional compensation will be paid for these services.

The total amount for optional services to be provided for Task Orders assigned in accordance with Article I and Exhibit B hereto shall not exceed \$ 925,000 , inclusive of all work of subconsultants and expenses. The not-to-exceed amount of each individual Task Order so assigned shall not exceed the amount specified in each Task Order.

The total amount of this Agreement, including all of the services detailed in Exhibits A and B hereto, shall not exceed \$ 3,497,000 inclusive of all work of subconsultants and expenses.

- B. Mileage Expenses: Mileage expenses, if applicable, shall be paid in accordance with County's Travel Policy (No. D-1), Section 5b, attached hereto as Exhibit D, marked "Board of Supervisors Policy," incorporated herein and made by reference a part hereof.
- C. Itemized invoices shall follow the format specified by County and shall reference this Agreement number and the appropriate Task Order number. Invoices shall be mailed to County's Project Manager at the following address:

County of El Dorado
Department of Transportation
2850 Fairlane Court
Placerville, California 95667
Attn: Adam Bane, Project Manager

or to such other location as County directs.

ARTICLE IV

Quality Control: Consultant shall have a quality control plan in effect during the entire time work is being performed under this Agreement. Consultant shall provide County with a general overview of Consultant's quality control plan in the form of a written outline. Consultant shall also identify critical quality control reviews for the major deliverables within each Task or Task Order. The plan shall take into account the following:

1. The plan shall establish a process whereby calculations and plans are independently checked, corrected and back-checked, all draft and final reports are reviewed for accuracy, completeness and readability before submittal, and all job-related correspondence and memoranda are routed and received by affected persons and then filed in the appropriate Task file.
2. Consultant is responsible for the accuracy and completeness of all data, plans, specifications and estimates prepared by Consultant under this Agreement and shall check all such material accordingly.
3. Consultant is responsible for a detailed review of design components and

related details, and the accuracy with which such designs are depicted on the plans and the details.

4. Plans, designs, estimates, calculations, reports and other documents furnished under each Task or Task Order shall be of a quality acceptable to the County's Contract Administrator, or designee.
5. A design, estimate, calculation, report or other document furnished under each Task or Task Order is of acceptable quality when it is neat in appearance, well-organized, technically and grammatically correct, and checked.
6. The minimum standard of appearance, organization and content of the drawings and reports shall be that of similar types utilized by County. County will provide examples to Consultant upon request.
7. The page identifying the preparer of engineering reports, the title sheet for specifications, and each sheet of plans shall bear the professional seal, certificate number, registration classification, expiration date of the certificate and the signature of the professional engineer(s) responsible for its preparation.

County's Contract Administrator, or designee, shall decide all questions pertaining to the quality or acceptability of deliverables furnished and work performed under this Agreement.

ARTICLE V

Progress Reports: Consultant shall submit progress reports at intervals that are commensurate with the requirements of the Tasks and based upon mutually agreeable schedules. At a minimum, Consultant shall submit progress reports once per month. The reports shall be sufficiently detailed for the County's Contract Administrator, or designee, to determine if Consultant is performing to expectations and is on schedule, to provide communication of interim findings and to afford occasions for airing difficulties or special circumstances encountered so that remedies can be developed. Separate detail shall be provided for each ongoing Task or Task Order. Progress reports shall include the total number of hours worked by Consultant and any authorized subconsultants.

ARTICLE VI

Licenses: Consultant represents that it and any and all subconsultants employed under this Agreement are duly licensed in good standing by the State of California to perform the services under this Agreement, and that Consultant and all subconsultants shall maintain said licenses in good standing throughout the term of this Agreement.

ARTICLE VII

Ownership of Data: Upon completion or earlier termination of all Services under this Agreement, ownership and title to all reports, documents, plans, maps, specifications, estimates, compilations and any and all other materials or data produced as part of this Agreement will automatically be vested in County and no further agreement will be necessary to transfer ownership to County. Consultant shall furnish County all necessary copies of data needed to complete the review and approval process of the project.

ARTICLE VIII

Changes to Agreement: This Agreement may be amended by mutual consent of the parties hereto. Said amendments shall become effective only when in writing and fully executed by duly authorized officers of the parties hereto. There shall be no change in Consultant's Project Manager, design team or subconsultants without prior written approval by County's Contract Administrator.

ARTICLE IX

Consultant to County: It is understood that the services provided under this Agreement shall be prepared in and with cooperation from County and its staff. It is further agreed that in all matters pertaining to this Agreement, Consultant shall act as Consultant only to County and shall not act as Consultant to any other individual or entity affected by this Agreement nor provide information in any manner to any party outside of this Agreement that would conflict with Consultant's responsibilities to County during the term hereof.

ARTICLE X

Confidentiality: Consultant shall maintain the confidentiality and privileged nature of all records, including billing records, together with any knowledge therein acquired, in accordance with all applicable state and federal laws and regulations, as they may now exist or may hereafter be amended or changed. Consultant, and all Consultant's staff, employees, subconsultants and representatives, shall not use or disclose, directly or indirectly, at any time, any such confidential information, other than to DOT for the purpose of, and in the performance of, this Agreement. This confidentiality provision shall survive after the expiration or termination of this Agreement.

ARTICLE XI

Assignment and Delegation: Consultant is engaged by County for its unique qualifications and skills as well as those of its personnel. Consultant shall not subcontract, delegate or assign services to be provided, in whole or in part, to any other person or entity without prior written consent of County. Notwithstanding this Article, County may, through its Contract Administrator, authorize Consultant to utilize subconsultants for services performed in Article I, Scope of Services, and in Exhibits A, "Scope of Work" and B, "Optional Tasks Scope of Work" for the particular tasks, work and deliverables identified therein. Said approval and authorization shall be sought and received by Consultant prior to subconsultants' commencement of any work. Notwithstanding any provision to the contrary, at no time shall County be obligated to pay separately for subconsultant services.

ARTICLE XII

Independent Consultant/Liability: Consultant is, and shall be at all times, deemed independent and shall be wholly responsible for the manner in which it performs services required by terms of this Agreement. Consultant exclusively assumes responsibility for acts of its employees, associates and subconsultants, if any are authorized herein, as they relate to services to be provided under this Agreement during the course and scope of their employment.

Consultant shall be responsible for performing the work under this Agreement in a safe,

professional, skillful and workmanlike manner, in accordance with good engineering practices, and shall be liable for its own negligence and negligent acts of its employees and subconsultants. County shall have no right of control over the manner in which work is to be done and shall, therefore, not be charged with responsibility of preventing risk to Consultant or its employees or subconsultants.

ARTICLE XIII

Fiscal Considerations: The parties to this Agreement recognize and acknowledge that County is a political subdivision of the State of California. As such, County is subject to the provisions of Article XVI, Section 18 of the California Constitution and other similar fiscal and procurement laws and regulations and may not expend funds for products, equipment, or services not budgeted in a given year. It is further understood that in the normal course of County business, County will adopt a proposed budget prior to a given fiscal year, but that the final adoption of a budget does not occur until after the beginning of the fiscal year.

Notwithstanding any other provision of this Agreement to the contrary, County shall give notice of cancellation of this Agreement in the event of adoption of a proposed budget that does not provide for funds for the services, products, or equipment subject herein. Such notice shall become effective upon the adoption of a final budget, which does not provide funding for this Agreement. Upon the effective date of such notice, this Agreement shall be automatically terminated and County released from any further liability hereunder.

In addition to the above, should the Board of Supervisors during the course of a given year for financial reasons reduce or order a reduction in the budget for any County department for which services were contracted to be performed, pursuant to this paragraph in the sole discretion of County, this Agreement may be deemed to be canceled in its entirety subject to payment for services performed prior to cancellation.

ARTICLE XIV

Default, Termination, and Cancellation:

- A. **Default:** Upon the occurrence of any default of the provisions of this Agreement, a party shall give written notice of said default to the party in default (notice). If the party in default does not cure the default within ten (10) days of the date of notice (Time to Cure), then such party shall be in default. The Time to Cure may be extended in the discretion of the party giving notice. Any extension of Time to Cure must be in writing, prepared by the party in default for signature by the party giving notice, and must specify the reason(s) for the extension and the date in which the extension of Time to Cure expires.

Notice given under this section shall specify the alleged default and the applicable Agreement provision and shall demand that the party in default perform the provisions of this Agreement within the applicable period of time. No such notice shall be deemed a termination of this Agreement unless the party giving notice so elects in this notice, or the party giving notice so elects in a subsequent written notice after the Time to Cure has expired.

- B. **Bankruptcy:** This Agreement, at the option of County, shall be terminable in the case of bankruptcy, voluntary or involuntary, or insolvency of Consultant.

- C. **Ceasing Performance:** County may terminate this Agreement in the event Consultant ceases to operate as a business, or otherwise becomes unable to substantially perform any term or condition of this Agreement.
- D. **Termination or Cancellation without Cause:** County may terminate this Agreement in whole or in part upon seven (7) calendar days written notice by County for any reason. If such prior termination is effected, County will pay for satisfactory services rendered prior to the effective dates, as set forth in the Notice of Termination provided to Consultant, and for such other services which County may agree to in writing as necessary for contract resolution. In no event, however, shall County be obligated to pay more than the total amount of the contract. Upon receipt of a Notice of Termination, Consultant shall promptly discontinue all services affected, as of the effective date of termination set forth in such Notice of Termination, unless the Notice directs otherwise. In the event of termination for default, County reserves the right to take over and complete the work by contract or by any other means.

ARTICLE XV

Notice to Parties: All notices to be given by the parties hereto shall be in writing and served by depositing same in the United States Post Office, postage prepaid and return receipt requested. Notices to County shall be in duplicate and addressed as follows:

<p>To County:</p> <p>County of El Dorado Department of Transportation 2850 Fairlane Court Placerville, CA 95667</p> <p>Attn.: Elizabeth B. Diamond, Interim Director of Transportation</p>	<p>With a Copy To:</p> <p>County of El Dorado Department of Transportation 2850 Fairlane Court Placerville, CA 95667</p> <p>Attn.: Tim C. Prudhel, Contract Services Officer</p>
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or to such other location as County directs.

Notices to Consultant shall be addressed as follows:

Quincy Engineering, Incorporated
 3247 Ramos Circle
 Sacramento, CA 95827

Attn.: Alan Glen, Project Manager

or to such other location as Consultant directs.

ARTICLE XVI

Prevailing Wage: County requires Consultant's services on public works project(s) involving local, state and/or federal funds to which prevailing wage requirements may apply. As a consequence, Consultant shall comply with all applicable state and federal prevailing wage rates, statutes, rules and regulations then in effect. In the event of conflict

between applicable federal and state provisions, the higher prevailing wage rate will apply. Consultant shall use the general prevailing wage rates determined by the Director of Industrial Relations for the county in which the work is to be done, which are available at the offices of the District Director of Transportation for the district in which the work is situated. Changes, if any, to the general prevailing wage rates will be available at the same location. The federal minimum wage rates are determined by the United States Secretary of Labor and may be examined at the office described above. Future effective general prevailing wage rates, which have been predetermined and are on file with the California Department of Industrial Relations are referenced but not printed in the general prevailing wage rates.

ARTICLE XVII

Indemnity: To the fullest extent allowed by law, Consultant shall defend, indemnify, and hold County harmless against and from any and all claims, suits, losses, damages, and liability for damages of every name, kind and description, including attorneys fees and costs incurred, brought for, or on account of, injuries to or death of any person, including but not limited to workers, County employees, and the public, or damage to property, or any economic or consequential losses, which are claimed to or in any way arise out of, directly or indirectly, or are connected with: (1) any negligent act, whether passive or active, error or omission, or willful misconduct of Consultant, its subconsultant(s) agents or employee(s) or any of these; or (2) any breach of any statutory, regulatory, contractual or legal duty of any kind related, directly or indirectly, to the services, responsibilities or duties required of Consultant by this Agreement. This duty of Consultant to indemnify and save County harmless includes the duties to defend set forth in California Civil Code Section 2778.

ARTICLE XVIII

Insurance: Consultant shall provide proof of a policy of insurance satisfactory to the El Dorado County Risk Manager and documentation evidencing that Consultant maintains insurance that meets the following requirements:

- A. Full Workers' Compensation and Employers' Liability Insurance covering all employees of Consultant as required by law in the State of California.
- B. Commercial General Liability Insurance of not less than \$2,000,000 combined single limit per occurrence for bodily injury and property damage.
- C. Automobile Liability Insurance of not less than \$500,000 is required in the event motor vehicles are used by Consultant in performance of the Agreement.
- D. In the event Consultant is a licensed professional and is performing professional services under this Agreement, Professional Liability (for example, malpractice insurance) is required with a limit of liability not less than \$1,000,000 per occurrence. For the purposes of this Agreement, Professional Liability is required.
- E. Consultant shall furnish a certificate of insurance satisfactory to the El Dorado County Risk Manager as evidence that the insurance required above is being maintained.

- F. The insurance will be issued by an insurance company acceptable to the Risk Management Division, or be provided through partial or total self-insurance likewise acceptable to the Risk Management Division.
- G. Consultant agrees that the insurance required herein shall be in effect at all times during the term of this Agreement. In the event said insurance coverage expires at any time or times during the term of this Agreement, Consultant shall immediately provide a new certificate of insurance as evidence of the required insurance coverage. In the event Consultant fails to keep in effect at all times insurance coverage as herein provided, County may, in addition to any other remedies it may have, terminate this Agreement upon the occurrence of such event. New certificates of insurance are subject to the approval of the Risk Manager, and Consultant agrees that no work or services shall be performed prior to the giving of such approval.
- H. The certificate of insurance must include the following provisions stating that:
1. The insurer will not cancel the insured's coverage without 30-day prior written notice to County; and
 2. The County of El Dorado, its officers, officials, employees, and volunteers, are included as additional insured, but only insofar as the operations under this Agreement are concerned. This provision shall apply to all liability policies except Workers' Compensation and professional liability insurance policies.
- I. Consultant's insurance coverage shall be primary insurance as respects the County, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by County, its officers, officials, employees, or volunteers shall be in excess of Consultant's insurance and shall not contribute with it.
- J. Any deductibles or self-insured retentions must be declared to, and approved, by County. At the option of County, either: The insurer shall reduce or eliminate such deductibles or self-insured retentions as respects County, its officers, officials, employees, and volunteers; or Consultant shall procure a bond guaranteeing payment of losses and related investigations, claim administration, and defense expenses. For the purposes of this Agreement, a sixty thousand dollar deductible for professional liability is approved.
- K. Any failure to comply with the reporting provisions of the policies shall not affect coverage provided to the County, its officers, officials, employees, or volunteers.
- L. The insurance companies shall have no recourse against the County of El Dorado, its officers and employees or any of them for payment of any premiums or assessments under any policy issued by any insurance company.
- M. Consultant's obligations shall not be limited by the foregoing insurance requirements and shall survive the expiration of this Agreement.

- N. In the event Consultant cannot provide an occurrence policy, Consultant shall provide insurance covering claims made as a result of performance of this Agreement for not less than three (3) years following completion of performance of this Agreement.
- O. The certificate of insurance shall meet such additional standards as may be determined by the contracting County department, either independently or in consultation with the Risk Management Division as essential for protection of County.

In addition, Consultant shall ensure that all subconsultants maintain workers' compensation, general liability, auto liability, and professional liability insurance as specified above and shall provide County with proof of same.

ARTICLE XIX

Interest of Public Official: No official or employee of County who exercises any functions or responsibilities in review or approval of services to be provided by Consultant under this Agreement shall participate in or attempt to influence any decision relating to this Agreement which affects personal interest or interest of any corporation, partnership, or association in which he/she is directly or indirectly interested; nor shall any such official or employee of County have any interest, direct or indirect, in this Agreement or the proceeds thereof.

ARTICLE XX

Interest of Consultant: Consultant covenants that Consultant presently has no personal interest or financial interest, and shall not acquire same in any manner or degree, in either: 1) any other contract connected with or directly affected by the services to be performed by this Agreement; or, 2) any other entities connected with or directly affected by the services to be performed by this Agreement. Consultant further covenants that in the performance of this Agreement no person having any such interest shall be employed by Consultant.

ARTICLE XXI

California Residency (Form 590): All independent Consultants providing services to County must file a State of California Form 590, certifying their California residency or, in the case of a corporation, certifying that they have a permanent place of business in California. Consultant will be required to submit a Form 590 prior to execution of this Agreement, or County shall withhold seven (7) percent of each payment made to Consultant during the term of this Agreement. This requirement applies to any agreement/contract exceeding \$1,500.

ARTICLE XXII

Taxpayer Identification Number (Form W-9): All independent contractors or corporations providing services to County must file a Department of the Treasury Internal Revenue Service Form W-9, certifying their Taxpayer Identification Number.

ARTICLE XXIII

California Forum and Law: Any dispute resolution action arising out of this Agreement,

including, but not limited to, litigation, mediation, or arbitration, shall be brought in El Dorado County, California, and shall be resolved in accordance with the laws of the State of California. Consultant waives any removal rights it might have under Code of Civil Procedure Section 394.

ARTICLE XXIV

Year 2000 Compliance: Consultant agrees that all hardware and software developed, distributed, installed, programmed, or employed as a result of this order will comply with ISO 9000 date format to correctly manipulate and present date-sensitive data.

Upon delivery of product and thereafter, the date and date logic component shall effectively and efficiently operate using a four-digit year.

Upon written notification by County of any hardware or software failure to comply with ISO 9000 date format, Consultant will replace or correct the failing component with compliant hardware or software immediately, at no cost to County.

ARTICLE XXV

Contract Administrator: The County Officer or employee with responsibility for administering this Agreement is Elizabeth B. Diamond, Interim Director of Transportation, Department of Transportation, or successor.

ARTICLE XXVI

Authorized Signatures: The parties to this Agreement represent that the undersigned individuals executing this Agreement on their respective behalf are fully authorized to do so by law or other appropriate instrument and to bind upon said parties to the obligations set forth herein.

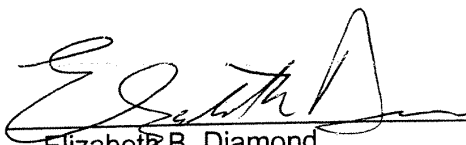
ARTICLE XXVII

Partial Invalidity: If any provision of the Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions will continue in full force and effect without being impaired or invalidated in any way.

ARTICLE XXVIII

Entire Agreement: This document and the documents referred to herein or exhibits hereto are the entire Agreement between the parties, and they incorporate or supersede all prior written or oral agreements or understandings.

Requesting Department Concurrence:

By:  Dated: 2/1/05
Elizabeth B. Diamond
Interim Director
Department of Transportation

IN WITNESS WHEREOF, the parties have executed this Agreement on the dates indicated below, the latest of which shall be deemed to be the effective date of this Agreement.

-- COUNTY OF EL DORADO --

By: James R. Sweeney Dated: 2/15/05
JAMES R. SWEENEY, FIRST VICE-CHAIRMAN
Board of Supervisors
"County"

Attest:
Cindy Keck
Clerk of the Board of Supervisors

By: Stephan Tyler Dated: 2/15/05
Deputy Clerk

-- QUINCY ENGINEERING, INCORPORATED --

By: John S. Quincy Dated: 2/3/05
John S. Quincy
President
"Consultant"

By: Alan P. Glen Dated: 2/3/05
Corporate Secretary



Exhibit A

Base Scope of Work

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Base Scope of Work

U.S. Highway 50/Missouri Flat Road Interchange Project
Phase 1 – Engineering & Environmental Planning, Design & Project Delivery Services

The following scope of work for this phase is based upon this phase being a separate contract, yet building on the scope to be completed in the previous phase - **Project Report and Environmental Document Preparation**. The Scope of Work sets forth services to be performed by Consultant by general tasks and detailed descriptions under those tasks, however the number of plan sheets for each type describes the level of effort to produce deliverables and are estimated. Services under this Agreement shall also include work implicit in or typically associated with completion of the tasks and production of deliverables, such that County receives as a final product a complete set of Plans, Specifications and Estimates and a bid specification package ready for advertisement and consistent with the Project Report and the Environmental Documents for the Project.

DESIGN PHASE

TASK 1 – PROJECT MANAGEMENT

Kickoff Meeting: For a successful project, it is very important for key personnel from County, Caltrans and Consultant to thoroughly discuss the project background, scope, concepts, schedule and management, and gather all existing information about the project that has not been previously obtained.

Project Management: Communication is the key to a successful project. Consultant's management style shall be "hands on" from a coordination point of view and is a continuous activity from the scoping/negotiations phase through the final design.

Project Development Team (PDT) Meetings: It is expected that PDT meetings will be held monthly during this phase. This scope provides for twenty-four (24) PDT meetings that would be attended by Consultant's Project Manager and Project Engineer. Subconsultants will attend PDT meetings on an as needed basis only. Consultant will work with County to schedule meetings, prepare agenda items and compile project meeting minutes for distribution.

Project Schedule: Consultant will develop a project schedule showing each task, start and end dates, and task duration. This schedule will be statused and coordinated with County's Contract Administrator, or designee.

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Project Progress Reports: Consultant will also prepare and submit monthly progress reports for County review. These reports will include progress-to-date, schedule updates, County action items, Consultant action items, work product deliveries, problems encountered with suggested solutions and anticipated work for the next month.

As a means of efficiency, Consultant shall utilize the latest communications technology. Electronic copies of reports and plans will be forwarded from Consultant to County via e-mail or through Consultant's FTP site.

Task 1 Deliverables:

**Final Scope/Schedule
Kickoff Meeting
Project Development Team Meetings
Project Progress Reports
Schedule Statusing/Updates**

TASK 2 – PREPARE FINAL ENGINEERING REPORTS

Task 2.1 – Geotechnical Design Report, Materials Report, Foundation Reports

Geotechnical studies for this project are proposed to include a "Geotechnical Design Report" (GDR) and "Materials Report" (MR) for roadway/ramp elements and will address new embankments, cut-slopes, retaining walls, culverts and flexible pavement design. Separate "Foundation Investigation" reports will be prepared for each of the Missouri Flat Road overcrossings and Weber Creek Bridge, respectively.

Task 2.1.1 – Roadway Geotechnical Study

The "Geotechnical Design Report" will be consistent with Caltrans format. It will summarize field exploration, laboratory testing, and encountered materials and conditions (including groundwater). The report will address: roadway, culvert, retaining wall and embankment foundations; cut slopes and excavation conditions (rippability); embankments; earthwork factors; corrosion potential; site seismicity; and construction considerations. The "Materials Report" (also consistent with Caltrans format) will address the condition of existing pavement sections at project conforms, design "R" value(s), subgrade preparation and pavement structural sections.

Services specifically excluded from this proposal include: evaluation of borrow pits or off-site and/or commercial materials sources; pavement recycling; deflectometer pavement testing; or evaluation of existing pavement sections. Evaluating the presence or absence of chemical contaminants or other "environmental" concerns is also specifically excluded from the scope of work, except as otherwise provided in the specific or optional tasks included herein and in Exhibit B hereto.

Elements of field study to adequately define subsurface materials and conditions are expected to include the following: site review and geologic reconnaissance; eight-to-twelve (8-12) double-ended refraction seismic profiles; eight-to-ten (8-10) backhoe test pits in proposed embankment

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toe areas and retaining walls; and a total of fifteen-to-twenty (15-20) borings to 3-10±m depth along existing/proposed roadways/ramps and proposed retaining wall alignments.

Field exploration is expected to be in Caltrans and County right-of-way with some access required through private property. Consultant will coordinate encroachment permits with County (if or as required) and obtain a Caltrans encroachment permit. Consultant understands that rights-of-entry to private property will be provided by County. No other special permits are expected to be required for this project element.

Drilling along existing ramps is expected to require shoulder closures for which Consultant will provide warning signs and traffic cones. Lane closures along Missouri Flat Road are expected to be required at some locations and Consultant's cost proposal includes an allowance for two (2) days of traffic control. Where borings are made in the road surface, Consultant or its designated subconsultant will patch the borings with asphalt "cold-patch" or dry-mix concrete to existing grade.

With respect to equipment access, effort shall be made to minimize surface disruption to landscape areas and / or natural ground. Exploration shall be performed during the dry-season conditions and disruption to ground shall be minimal. If such areas are disturbed by drilling operations, they shall be restored to pre-existing conditions by sweeping paved surfaces and shoveling soil to re-establish original contours in unpaved areas. All borings shall be backfilled per county requirements and, where borings are made in the road surface, will be patched to match existing with asphalt "cold-patch" or dry-mix concrete to existing grade. Excess drill cuttings shall be removed from the site.

Laboratory testing is expected to include: moisture-density and strength testing of "intact" materials; "R"-value; gradation and Atterberg Limit index tests; maximum dry density determinations; pH, minimum resistivity, and chloride/sulfate content for corrosivity screening. This scope includes provision for up to eight (8) "R"-value tests (four (4) at interchange ramps and four (4) along County roads) to be selected from bulk samples of anticipated subgrade materials.

Task 2.1.2 – Bridge Foundation Investigation

Each foundation report will summarize subsurface exploration and field and laboratory soils testing, include a "Log of Test Borings" drawing (suitable for inclusion with the plans), and discuss encountered earth materials and foundation conditions. Seismic criteria for use in structure design (peak bedrock acceleration, soils profile type, etc.) will be provided in accordance with typical Caltrans practice.

At the Missouri Flat Road Overcrossing, subsurface exploration to adequately define earth materials and foundation conditions is expected to include a total of three (3) sampled, logged test borings (one (1) at each support location) penetrating to 12-15±m depth below original ground surface.

At the Weber Creek Bridge, Consultant shall make a total of eight (8) test borings (one (1) at each support location) penetrating to 15-18±m depth below original ground surface. In order to help

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identify variations in rock surface level and local rock conditions, borings at this site will be supplemented with geologic reconnaissance/mapping and refraction seismic profiling.

A Caltrans encroachment permit will be required to compete fieldwork for each site and Taber Consultants, a listed subconsultant under this Agreement, has made allowance for fees associated with obtaining an encroachment permit. At Weber Creek, bulldozer work will be required to pioneer trails to drill locations at the bents and provision is made herein for three (3) days to complete such work.

Lane and/or shoulder closures along U.S. 50 are expected to be required at each site to complete the fieldwork and this scope includes an allowance for three (3) days (two (2) days at Weber Creek and one (1) day at Missouri Flat Road Overcrossing) of traffic control. Where borings are made in the road surface, Consultant or its designated subconsultant will patch the borings with asphalt "cold-patch" or dry-mix concrete to existing grade.

Prior to commencement of field exploration, Consultant's personnel will mark the site and notify Underground Service Alert (USA) for location of underground utilities before starting field exploration. This scope of work specifically excludes sampling for or evaluation of the presence or distribution of hazardous materials, except as otherwise provided in the specific or optional tasks included herein and in Exhibit B hereto. If hazardous materials are encountered during field exploration, work will be stopped at that location and County shall be notified; a modified scope of work may be required.

The test borings will be advanced by compressed air driven percussion equipment and/or rotary methods, with "standard penetration" sampling at 1.5±m intervals. Diamond coring is expected to be necessary to advance the borings into rock. The encountered soils will be field classified and borings logged (including groundwater conditions) by an engineer/geologist. In rock, cores will be recovered from the borings and logged as to rock type and condition.

Test borings are expected to encounter rock at shallow depth; therefore, laboratory testing for bridge foundation investigation is expected to be limited to moisture-content dry density and unconfined compressive strength tests on suitable soil samples retained. Point Load Index tests will be performed on portions of selected rock cores in evaluation of unconfined compressive strength of rock materials. Recovered rock cores will be saved for reference.

Where temporary access trail is required for equipment access, routes will be selected to use existing (abandoned) construction roads and minimize tree / brush removal. New temporary access trails shall be constructed in a manner to minimize concentration of runoff and soil erosion by limiting cast-over fill and outsloping the trail surface. "Slash" (organic debris) from temporary trail construction will be dispersed so as to minimize potential hazard, and will be placed in locations where it will not be discharged to streams.

Upon completion of drilling operations, the access trails will be abandoned in a manner to promote maintenance, free drainage and to minimize concentrated runoff and soil erosion. Cast-over fills will be "pulled" and the trail will be reshaped to approximate natural grade. Disturbed areas shall be manually seeded with commercially available seed-mix suitable to the natural

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environment and straw mulch shall be applied at 2 tons per acre. Straw wattles (500 lf 8" dia.) shall be placed as appropriate to minimize erosion.

Task 2.1.3 – Evaluation/Testing of Naturally Occurring Asbestos

Dust generated by earthwork projects can be a significant health hazard where naturally occurring asbestos is encountered. In El Dorado County, asbestos minerals are most commonly found in metamorphosed ultramafic rock, particularly serpentinite, and in fault zones. Published geologic mapping, Caltrans documents and previous site reconnaissance by Consultant indicate the project area is underlain by granitic rock. However, Consultant's previous geologic reconnaissance indicates that some rock may be slightly altered/metamorphosed, and detailed mapping was not performed. Although transported to the site, "naturally occurring" asbestos also might be present in aggregate base materials used in construction of the existing roads.

Evaluation of the potential for naturally occurring asbestos to be encountered in project excavations into native ground will be limited to: 1) detailed geologic mapping of anticipated excavation locations (and immediate vicinity) to classify exposed rock types, shear zones/surfaces, or other indicators of possible asbestos; 2) collecting rock samples where indicators suggest the possible presence of asbestos; and 3) testing collected samples for asbestos content. Soils samples may also be collected for analyses of asbestos content if or where soils are identified that might have derived from rock with indicators of possible asbestos. For budgetary purposes, Consultant anticipates not more than ten (10) soil and/or rock samples.

Evaluation of the potential for asbestos occurring in aggregate base material of the existing roads will be limited to collecting and analyzing up to ten (10) samples of the aggregate at selected locations programmed for roadway geotechnical study borings.

Sampling and analyses will be performed generally in accordance with Air Resources Board Method 435. The purpose of the evaluations described above will be to attempt to identify if naturally occurring asbestos is present. It is not intended to quantify the occurrence of asbestos or to quantify asbestos exposure risk.

Before starting this study, a "draft" sampling plan describing Consultant's or its designated subconsultant's proposed methodology and analyses will be prepared and submitted for review by Consultant, the El Dorado County Air Quality Management District, Caltrans and any other controlling authorities for the project. A final sampling plan will then be prepared incorporating changes as warranted based on comments received from review of the "draft" sampling plan. When laboratory analyses are complete, a "draft" summary report describing the methodology and findings, including copies of the laboratory reports will be prepared and submitted for review by the controlling authorities. A final report will then be prepared incorporating changes as warranted based on comments received from review of the "draft" report.

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Task 2.1.4 – Aerially Deposited Lead Testing and Specifications

Aerially deposited lead (ADL) is a concern in near surface soil adjacent to roadways where exhaust from automobiles using leaded gasoline might have resulted in accumulation of significant lead concentrations.

The presence of ADL will be evaluated by a program of sample collection and analyses designed based, in part, on discussion with a representative of Caltrans District 3 Office of Environmental Engineering – South. The ADL program will include collecting soil samples and testing (by an analytical laboratory) for total lead, soluble lead and pH. Sampling and analyses methods and scope will be detailed in a draft “Workplan” for Caltrans and County review and approval before sampling. A site specific health and safety plan will also be prepared and appended to the workplan. Consultant will meet with a Caltrans representative as part of the workplan preparation process. A final Workplan will then be prepared incorporating Caltrans’ comments, if any.

The number and locations of samples necessary for the study will depend on a number of as-yet not well defined variables, including the depths of proposed excavations and staging of excavations (data for material from separate stages of construction might require separate evaluation). In order to have statistically valid evaluation of the sample results, a minimum number of samples might be required for each stage of excavation and the number of stages of construction may control the total number of samples necessary. For the purposes of this scope of work, Consultant assumes that all excavation will be performed effectively as a single stage, but will allow for statistical analyses of the data divided into as many as four (4) stages.

Caltrans typically requires that ADL samples be collected to the full depth of any excavation. Project earthwork below existing grades is expected to be limited to the upper 0.5 m in fill areas. Excavation depths for bridge, wall and possibly sign foundations are, as yet, undefined. It is expected that many of the foundation excavations will encounter rock.

Caltrans documents indicate construction of new Highway 50 to replace Old Highway 50 occurred during the 1960’s, with construction of the Weber Creek bridges in about 1962 and construction of the Missouri Flat Road overcrossing in about 1968. The time between construction of existing Highway 50 and the phase-out and then banning of lead additive in gasoline (1992) is relatively short, and the potential for significant concentrations of ADL along the shoulders of the existing roads is considered low, and the risk of significant concentrations deeper than 1 m (3 feet) is considered very low.

Due to the perceived low risk of ADL in deeper samples, Consultant proposes a staged sampling program with initial efforts limited to shallow sampling performed with hand tools. An additional stage of deeper sampling will be performed only if warranted based on proposed foundation depths (when determined) and analytical results of the initial samples, or if required by Caltrans.

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STAGE I

Sampling stations will be selected spaced at approximately 100 m (300 foot) intervals along the shoulders of the highway, on- and off-ramps, and roads where earthwork is proposed (cut and/or fill). Consultant anticipates a total of up to eighty (80) sampling stations.

At each station, sample locations will generally be selected at 1/5, 1/2, and 4/5 the distance between the edge of pavement and the outside edge of earthwork. Where the earthwork width beyond the edge of pavement is less than 4 m (13 feet), a mid-point location will not be selected and where the earthwork width is less than 2 m (6 feet), only the mid-point location will be selected. A total of up to two hundred (200) sample locations are anticipated.

At each sample location, samples will be collected from the 0.0-0.15 m, 0.30 m-0.46 m and 0.61-0.76 m depth intervals (0-0.5, 1.0-1.5, and 2.0-2.5 foot). Sampling using "direct push" methods is not expected to be feasible at most locations due to ground slope and coarse fragments in the existing fill. Samples will be collected using hand excavation and sampling methods. Sampling will not be performed where "refusal" on native rock is encountered. A total of up to six hundred (600) samples are anticipated.

ANALYTICAL TESTING

Caltrans District 3 does not have a DTSC variance for on-site disposal of lead-contaminated soil and analytical testing will be limited to evaluating whether offsite disposal is necessary. The testing will include testing for total lead, soluble lead using WET extraction (WET testing), soluble lead using TCLP extraction (TCLP testing) and pH. Proposed analytical testing will include:

- All samples will be tested for total lead by EPA method 6010, using metals extraction by EPA method 3050A.
- Initially, all samples with 50 mg/kg or more total lead will be tested for soluble lead by EPA method 6010 using the WET test extraction method with citrate buffer. Consultant has assumed two hundred (200) samples will be tested in this initial scope.
- Presuming a single source and/or chemical state of lead in the soil, and presuming other factors (soil chemistry and other soil properties, sampling and analytical methodologies, etc.) are uniform, total lead concentration and soluble lead concentration would be expected to have a linear relationship (i.e. directly proportional concentrations). If the correlation coefficient ("r") calculated to quantify the variation between the total and soluble lead results does not indicate a suitable correlation (i.e. "r" greater than about 0.7 to 0.8) the initial analyses will be supplemented by analyzing all samples for soluble lead using WET extraction. If additional testing is required for soluble lead, approval of optional tasks 2.1.5/2.1.6 (see Exhibit B) would be needed.
- All samples exceeding 1000 mg/kg total lead should be tested for soluble lead by EPA method 6010 using the TCLP extraction method. This base scope provides budget for up

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to four (4) samples to be tested. If more than four (4) samples exceed this threshold, approval of optional tasks 2.1.5/2.1.6 (see Exhibit B) will be required.

- pH analyses will be performed for ten percent (10%) of samples. This scope provides for up to sixty (60) samples to be tested for pH using EPA method 9045.

Following the field and laboratory programs and data analyses, a draft report will be prepared for Caltrans review and approval. The report will present Consultant's technical approach, sample locations (reported by station and offset), copies of the analytical laboratory reports, tabular summary of the laboratory results, statistical analyses results (by "bootstrap" method for mean and upper confidence limit lead concentrations using the Caltrans District 4 developed EXCEL tool "Bootstrap3 04-4874G1-VT") and Consultant's opinion as to classification of soil under State and Federal hazardous waste criteria. A final report will then be prepared incorporating Caltrans' comments, if any.

ASBESTOS CONTAINING MATERIALS AND LEAD BASED PAINT SURVEYS

Lead based paint or materials containing asbestos might have been used on the existing Missouri Flat Road Bridge or Webber Creek bridges. Lead based paint and asbestos surveys are proposed for each of the bridges to evaluate if concentrations of these materials are present that would require special procedures.

Federal regulations (asbestos NESHAP) require notification of applicable state and local agencies and/or the EPA regional office before all structure demolitions (with exception for certain residential structures) or before renovation of structures that contain a certain threshold amount of asbestos. Notification appears to be required for demolition of the Missouri Flat Road Overcrossing and would apply to renovation of the Webber Creek bridges if surveys proposed herein indicate the presence of asbestos exceeding the threshold quantities. The applicable local agency is the El Dorado County Air Quality Management District.

An appropriately trained and certified inspector will observe each of the structures to be demolished for evidence of lead-based paint and materials that contain asbestos. Bulk samples of paint and suspected ACMs will be collected using typical industry procedures. The number of samples necessary will depend on the number and types of paint and building materials observed. Paint samples will be analyzed by EPA Method 6010 for lead content and suspected ACM samples will be analyzed by polarized light microscopy (PLM) for asbestos content. "Point counting" will be performed for asbestos samples reported by PLM as containing asbestos in concentrations less than ten percent (10%).

It is anticipated that construction of the bridges was "homogeneous," that representative samples can be collected from the road shoulders at the abutments and that lane or shoulder closure will not be necessary to obtain appropriate samples. On a preliminary basis, Consultant assumes a total of up to ten (10) paint samples, fifteen (15) suspected ACM samples and fifteen (15) "point counts." Taber Consultants will sub-contract these inspection and testing services.

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Base Scope of Work



The State Certified asbestos sub-consultant will determine sampling and analytical methods and procedures for evaluating ACMs and lead paint in accordance with appropriate regulatory criteria. The survey results will be presented in reports that will include copies of the analytical results.

Task 2.1.7 – Surveying and Mapping

County has engaged Cartwright Aerial Surveys under separate contract to fly the project per Caltrans specifications and provide aerial photos and lab processing services for mapping compilation purposes. Cartwright will also provide an ortho-rectified aerial photo for use in developing displays. County has developed all ground control for the purposes of aerial photography that will serve as the basis of the overall project survey control. This control will be provided by County to the surveyor, Topographic Surveys, Inc. (TSI), a listed subconsultant under this Agreement. TSI is proposing a Task/Zoning process for the digital aerial mapping and field surveying actions. This will allow for TSI's personnel to focus its efforts to produce quality Base Maps within specifications, budget and on schedule. This objective will be accomplished by proven management strategies and quality assurances "gates" during the entire surveying and mapping process.

Project Planning

- Review existing County provided, Project Horizontal and Vertical Control Report
- Perform field reconnaissance to identify area that will require field surveying completion, due to dense vegetation, along with a search for monumentation.
- Develop field Safety Plan for on and off highway activities; lane closures will be required. Lane closures will be in accordance with Caltrans Safety specifications and performed by Flash Safety Company, Inc., a second-tier subconsultant. Topographic Surveys' Safety Plan will be submitted to County/Caltrans for approval.
- Review with County, Right-of-Entry and Caltrans Encroachment Permits. The required permits will be obtained by County.
- Mobilization and Resources, Topographic Surveys Inc. has over eight (8) field personnel available, and the necessary resources to undertake and complete this project in a timely manner. TSI teams will consist of Party Chief, Safety Officer and Chainman as required.

Digital Aerial Mapping

- TSI will review the Aerial Photography performed by Cartwright Aerial Surveys, for confirmation with Caltrans specifications.
- TSI will prepare perform Analytical Aero triangulation X,Y,Z. Control extension, per Caltrans Photogrammetric Specifications.
- TSI create continuous digital topographic mapping at 1:500 metric, 0.5 meter contour interval over the project area. The stereo digital compilation will be prepared in MicroStation software, on Zeiss P3 Planicomp Analytical Mapping system.
- The topological triangle network files (*.tn) are the bases for the project Base Mapping.
- Data captured at a minimum will include: visible man made features, such as; roadway, sidewalks, driveways, buildings, bridges, surface utilities and other such improvements.

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Base Scope of Work

- TSI will provide preliminary Base Maps in MicroStation electronic files, prior to field completion and topography editing.

Horizontal Control Extensions/Field Topography.

- Topographic Surveys, Inc will extend the existing Horizontal and Vertical Control provided by County, by using (GPS) Trimble Global Positioning System and/or standard field surveying methods in those areas requiring field completion.
- TSI will perform field surveys in those areas, identified to enhance design considerations. They may consist of retaining walls structure, utilities, profiles and cross sections. These miscellaneous field surveys will be performed utilizing Trimble 5600-Series Reflectorless/Robotic total stations.
- Bridge certification field surveys are to be based on County surveys. The cross-sectional data will be captured on Twenty (20) meter intervals, along with the overall structure.
- All field data captured will be downloaded and processed daily, and edited into the project base maps.

County will be responsible for providing all surveying data and mapping needed to establish existing property boundary/ right-of- way.

Task 2.2 – Bridge Type Selection Report and Seismic Retrofit Strategy Report

Caltrans requires that projects involving bridges are to be evaluated at a Type Selection Meeting early in the design process to assure the appropriate bridge type has been selected prior to extensive design work being completed. In addition, bridges that have seismic deficiencies are to be evaluated by a committee to concur with the recommended seismic strategy early in the design phase. Bridge General Plans will be developed in accordance with the previously completed planning studies for each of the bridge structures in this project. A Bridge Type Selection Report covering both bridges will summarize the findings of the preliminary design phase and will include the following:

- Preliminary Geotechnical Report
- Utility information
- Preliminary construction staging requirements
- Preliminary alignment drawings
- Bridge Site Data Submittal (BSDS)
- Bridge general plans
- Bridge Type Selection Form
- Bridge type discussion and evaluation
- Construction cost estimate for each alternative
- Bridge type recommendation

This report will be presented to and discussed with County in draft form and with Caltrans at a Bridge Type Selection Meeting held at Caltrans Structures offices. All comments will be addressed and incorporated in the Final Report. Final design will occur upon concurrence by County and Caltrans. The approved report will become the basis for the project's final design.

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Consultant will develop seismic retrofit measures for the Weber Creek Bridge and a general plan for each of up to three (3) alternative retrofit strategies. The general plans will include concept drawings defining each alternative that will include plan view, elevation and typical sections as required to illustrate each of the proposed alternatives. A preliminary estimate of the construction cost of the feasible strategies will be developed including structural material quantities and estimated unit costs from bids received on previous similar projects.

Consultant will write a Seismic Retrofit Strategy Report that includes the following:

- Project background
- Field review information
- Foundation Letter Report
- General plans
- Seismic evaluation methodology and results
- Preliminary right-of-way information
- Utility information
- Hydraulic discussion
- Environmental discussion
- Construction cost estimate
- A description of the advantages and disadvantages of each alternative so that County and Caltrans can judge each alternative on its own merits

Consultant will meet with County and Caltrans to present the proposed Seismic Retrofit Strategy. The goal of the meeting is to gain Caltrans' signatory approval of the proposed strategy and to update the project cost estimates for funding purposes. Minutes of the meeting will be documented.

All comments received in the Strategy Meeting will be addressed in writing, and specific action items completed with results summarized. (This scope includes seismic retrofit strategies consistent with the previously completed "Seismic Assessment Report," but does not include additional global or local analysis if requested by representatives at the Strategy Meeting. Any additional analysis will be considered extra work to be performed with supplemental budget and schedule as needed.)

The Draft Seismic Strategy Report will be updated with the meeting minutes, summaries of action items and other information to create the Final Retrofit Strategy Report.

Task 2.3.1 – Prepare Traffic Management Plan

Consultant, in conjunction with Fehr & Peers Associates, Inc. (hereinafter "Fehr & Peers"), a listed subconsultant under this Agreement, and Caltrans, will develop the Traffic Management Plan for the project in accordance with the Caltrans *Draft Transportation Management Plan Guidelines* dated May 11, 2001. The plan documents what specific measures will be required to reduce impacts to traffic and notes the costs of implementation. It will include lane closure charts showing specific hours during the day and/or night when traffic lanes can be closed. It also notes specific traffic control devices that can be used to improve traffic flow and safety through the work zone such as advance portable, changeable message warning signs and press releases to communicate upcoming lane closures. This scope includes establishment of a Transportation Management Team (TMT) consisting of Consultant staff, County staff, City of Placerville staff,

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California Highway Patrol staff and various Caltrans branches. This scope includes up to three (3) meetings of the TMT, with Consultant making the meeting arrangements, conducting the meetings and issuing meeting minutes.

Task 2.3.2 – Additional Operational Evaluations to Support the Traffic Management Plan Preparation

Fehr and Peers will collect new a.m. peak hour, mid-day peak hour and p.m. peak hour turning movement counts at the following four intersections.

1. Missouri Flat Road/Prospectors Plaza
2. Missouri Flat Road/U.S. 50 Westbound Ramps
3. Missouri Flat Road/U.S. 50 Eastbound Ramps
4. Missouri Flat Road/Mother Lode Drive

The counts will be for two-hour periods (i.e., 7-9 a.m.) and be organized by 15-minute increment. Fehr & Peers will also conduct one (1) field visit to verify intersection lane configurations, traffic control and signal timing.

A SYNCHRO model will be set up to analyze peak hour traffic operations at the four study intersections. This task will include the initial model set up and analysis of existing conditions. The model will be validated to replicate field observations of peak hour operations (i.e., maximum queues). The analysis results will provide peak hour delay estimates and corresponding level of service (LOS) for each intersection. In addition, critical queues will be identified and reported.

Fehr and Peers will develop turning movement forecasts for up to three (3) construction stages. These forecasts will reflect travel demand changes resulting from construction modifications of existing intersections or roadways. This effort is expected to be limited to traffic shifts based on the detailed construction staging plans.

Fehr and Peers will analyze a.m. peak hour, mid-day peak hour and p.m. peak hour traffic operations at the four (4) study intersections for up to three (3) construction stages. The analysis results will provide peak hour delay estimates and corresponding LOS for each intersection. In addition, critical queues will be identified and reported. Improvement recommendations to reduce projected delays and queuing will be developed in cooperation with the project team. Where possible, County's minimum LOS threshold will be maintained.

The operations analysis done under this task will be documented in a technical memorandum that describes the results and recommendations. Up to four (4) hours of staff time has been budgeted to respond to comments on the memorandum. This information will be incorporated into the Traffic Management Plan being developed by Consultant.

Task 2.4 – Final Drainage Report

Consultant will update the Preliminary Drainage Report that was prepared during the Project Report and Environmental Document phase of the project to a design level document. The report

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will follow Caltrans' format. This drainage report will focus only on the Phase 1 project; however, Consultant will size and configure the drainage systems that will accommodate the ultimate project, to the extent possible recognizing that portions of the Phase 1 system will require reconstruction in Phase 2. This study will review anticipated rainfall and how the resulting storm water will be handled within the project area. Consultant will determine if upgrades or changes are needed to the existing drainage facilities. The study will provide the design calculations for each drainage basin and drainage system needed to convey storm water through the project site. Caltrans' North Region Hydraulics Branch will review the Drainage Report for concurrence. Consultant will incorporate appropriate comments into the Final Report and will provide written responses to all comments.

Task 2.5 – Concepts for Aesthetic Treatment

Consultant will develop conceptual aesthetic treatments for the retaining walls. These will include color rendered aesthetic treatment concept sections a 1:500 or other scale appropriate for graphics. Aesthetic treatments for retaining walls that are within public view and aesthetic walls at "pedestrian scale," i.e., high-visibility areas, will be presented. These high-visibility areas include entrances at Park-and-Ride lots and sidewalk areas viewed by pedestrians and motorists. Up to three (3) concepts will be developed based on existing rock wall faces in the Placerville area, simulated rock wall textures and stain (color) treatments and will be presented for consideration by County. A meeting to present and discuss concepts with County will provide an opportunity to view project elements in graphic representations. Upon approval of the preferred aesthetic treatment by County, Consultant will incorporate the proposed design into the plans (see Task 7.2)

Consultant will also work with County staff to identify aesthetic treatments that may be considered in the bridge rails. It is understood that Consultant is not offering Architectural services for this task, but rather utilizing simple concrete form liner designs and minor variations to bridge rails that enhance the aesthetics of the proposed interchange. If County desires more elaborate treatments, a separate scope of work would be required.

Fehr and Peers will also work with County staff to identify decorative lighting fixtures (limited to those that are readily available from vendors and approved for use on state highways) to be utilized for the project, provided the construction budget allows for these enhancements.

Task 2.6 – Value Analysis Study

A Value Analysis (VA) Study is required to be conducted for all projects utilizing Federal funding that exceed \$25 million. The purpose of the study is to evaluate the proposed project to determine if the design, materials proposed and construction methods are the most cost effective choices. The study will identify potential areas of cost savings that County would have the option of implementing. Value Management Strategies Inc. (VMS), a listed subconsultant under this Agreement, will facilitate the delivery of such a study for this project. The VA Study is to follow the activities as defined in the Caltrans VA Activity Chart. The list of VA Study participants will be developed by County and Caltrans. The study will be six (6) days and the specific dates will be determined by mutual agreement of the parties. A pre-study teleconference will be scheduled no later than the week prior to the start of the study. Once the Draft report has been reviewed by

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the project stakeholders, an implementation meeting will be conducted to resolve the disposition of the VA Alternatives presented in the report.

The scope of the work shall include, but is not limited to, the following:

- Provide a qualified, independent Certified Value Specialist (CVS) team leader to lead a VA study in accordance with Caltrans value methodology.
- Provide VA study documentation in accordance with the Caltrans VA Report Guide.
- Provide the following technical team members (budget allows for up to fifty-six (56) hours per consultant technical team member) for the following disciplines:
 - Structural Engineer (Consultant and Caltrans Representative)
 - Highway Engineer (Consultant and Caltrans Representative)
 - Traffic Engineer (Fehr and Peers and Caltrans Representative)
 - Construction Engineer (Consultant Representative)
 - Other County and Caltrans Representatives as needed
- Ensure that applicable data and correspondence and any other relevant information necessary for the VA study is collected, developed and distributed.
- Facilitate VA Team Meetings.

The VA Team Leaders are responsible for the following:

- Leading pre-study meeting(s). Attendance should include County staff, the Caltrans DVAC, project manager and key project development team staff, key outside project stakeholders (local transportation agencies, local government, and permitting agencies) and any known VA team members.
- Updating the draft VA study charter per the Caltrans Team Guide.
- Complete the Preliminary VA Report with input/review of VA Team and technical reviewers in accordance with the VA Report Guide – Third Edition and with the following items:
 - A distribution list for the VA reports must be developed with County, Consultant and the Project Manager.
 - Submit Preliminary VA Report; no more than two (2) weeks following Initial VA Presentation, as specified in the report distribution list.
 - The preliminary report shall include hardcopy distribution. Copies of the reports shall be distributed to the VA team, key technical reviewers and the project stakeholders.
- Coordinate with County and Consultant on the project stakeholders responses to the preliminary VA report and prepare for an implementation meeting to resolve the disposition of the VA alternatives, finalize the VA study reportables (costs, performance and value indices).

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- Submit Final VA Report as specified in Caltrans VA Report Guide – Third Edition. Report should be submitted no more than three (3) weeks following VA Final Presentation. The Final VA report shall also include an electronic copy in PDF format of the entire report and a separate file in Excel format of the VA study summary report.
- Submit electronic copies of the updated VA study summary reports and updated Executive Summary as needed to document the resolution of conditionally approved alternatives as specified in the Final VA Report to the County, Consultant, Caltrans PM, DVAC and the HQ VA Branch.
- VMS shall schedule and facilitate an implementation meeting at a date and time to be determined by County, the Project Manager and Caltrans.
- Results of the Final Value Analysis, if adopted by the County, shall be incorporated into the Project Plans, Specifications and Estimates. In the event that Value Analysis recommendations are directed to be implemented by the County, and cause an increase in the scope of work required for the project, the agreement will be subject to amendment.

Task 2 Deliverables:

- Draft Geotechnical Design Report and Materials Report
- Final Geotechnical Design Report and Materials Report
- “Log of Test Borings” drawings for retaining walls
- Draft Foundation Investigation Report for Missouri Flat Road Overcrossing and Weber Creek Bridges
- Final Foundation Investigation Report for Missouri Flat Road Overcrossing and Weber Creek Bridges
- “Log of Test Borings” drawings for Missouri Flat Road Overcrossing and Weber Creek Bridges
- Permits for Geotechnical Work
- Draft and Final Sampling Plan- Naturally Occurring Asbestos
- Draft and Final Naturally Occurring Asbestos Report
- ADL Workplan, Testing and Specifications
- Lead Based Paint Surveys
- Aerial Photos (by County)
- Topographic Maps at 1:500 with 0.5 m contours
- Field Survey Data at Conforms, bridges, walls, drainage facilities, utilities and where needed to supplement aerial generated data
- Digital Terrain Model
- Existing Property Boundary Survey and Electronic R/W Map (by County)
- Bridge Type Selection Report/Meeting (Missouri Flat Road and Weber Creek Bridges)
- Seismic Retrofit Strategy Report/Meeting (Weber Creek Bridges)
- Traffic Management Plan and TMT Meetings
- Operational Evaluations at 4 intersections within project limits during construction
- Final Drainage Report

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- Conceptual Aesthetic Treatment of Walls, Bridge Railings and Lighting Fixtures
- Conduct Value Analysis Study
- Draft VA Study Report
- Final VA Study Report

TASK 3 – PREPARE DRAFT ROADWAY PLANS

Consultant will prepare draft roadway plans for this construction contract. Preparation of the roadway plans will be done in accordance with the Caltrans *PS&E Guide* and the Caltrans *Drafting and Plans Manual*. The following types of plan sheets will be needed. The anticipated number of plan sheets for each type is shown in parentheses¹. In addition, cross sections will be provided at Final PS&E for staking purposes and contractor information in conformance with Caltrans practices. Draft Roadway 30% Plans shall consist of project roadway typical sections, layouts, profiles and super elevation sheets.

U.S. Highway 50/Missouri Flat Road Interchange and Highway 50 Widening Project*	
<ul style="list-style-type: none"> ■ Title Sheet (1) ■ Typical Cross-Sections (5) ■ Key Map (1) ■ Layouts (10) ■ Profile (15) ■ Superelevation (10) ■ Construction Details (5) ■ Contour Grading Plan (4) ■ Drainage Plans (10) ■ Drainage Profiles (6) ■ Drainage Details (3) 	<ul style="list-style-type: none"> ■ Drainage Quantities (1) ■ Utility Plans (5) ■ Stage Construction, Traffic Handling Plans and Detours (24) ■ Construction Area Signs (2) ■ Pavement Delineation and Sign Plans (10) ■ Overhead Sign Plans and Details (12) ■ Summary of Quantities (4) ■ Total Anticipated Roadway Plans to be prepared by Consultant is 128 ■ Bridge and Retaining Wall Plans are shown in Task 7
<p><i>Plans to be prepared by Subconsultants:</i></p> <ul style="list-style-type: none"> ■ Signal, Lighting, Overhead Sign Lighting, Ramp metering, and Operations Systems - prepared by Fehr and Peers, see Task 4 ■ Storm Water Pollution Prevention and Erosion Control - prepared by WRECO, see Task 6 ■ Riparian Restoration - prepared by Jones and Stokes, see Optional Task 19.5 ■ Landscaping and Tree Replacement - prepared by Jones and Stokes as a separate PS&E, see Optional Task 19.1 	

Task 3 Deliverables: Draft Roadway Plans (30%)

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TASK 4 – SIGNAL, LIGHTING AND OVERHEAD SIGN LIGHTING

Task 4.1 – Prepare Traffic Signal Plans, Specifications and Estimates (PS&E)

Fehr & Peers will obtain as-built plans and base maps and field check existing conditions including intersection lane geometrics. Potential conflicts between overhead/underground utilities, drainage facilities, etc. and equipment that may be reused will be noted.

Fehr & Peers will prepare draft signal plans, specifications and estimates (PS&E) for the modification of the existing intersection at Missouri Flat Road/Prospector's Plaza Drive and for new signals at the following intersections:

- Missouri Flat Road/U.S. 50 westbound ramps
- Missouri Flat Road/U.S. 50 eastbound ramps
- Missouri Flat Road/Mother Lode Drive

The Draft PS&E will be prepared in accordance with Caltrans requirements and will be submitted to Caltrans and County for review and comment.

Subtasks necessary for draft submittal include:

- Coordinate with utility service providers to obtain electrical and telephone service points for traffic signals.
- Prepare detailed traffic signal installation designs including type of controller, vehicle detection, vehicle and pedestrian signals, signal interconnect, emergency vehicle preemption detection and the conductor and equipment schedules.
- Prepare detailed design at 1:200 metric scale for signal plans.
- Prepare special provisions.
- Prepare cost estimate for the traffic signals.
- Review by engineer in responsible charge.
- Submit preliminary PS&E.

Task 4.2 – Lighting and Sign Illumination

Fehr & Peers will obtain as-built plans and field check the existing lighting systems. Potential conflicts between overhead/underground utilities, drainage facilities, etc., and equipment that may be reused will be noted.

Fehr & Peers will prepare preliminary lighting and sign illumination plans that will include the electroliers necessary to maintain minimum lighting levels along Missouri Flat Road between Prospector's Plaza Drive and Mother Lode Drive. Subtasks necessary for draft submittal include:

- Identifying lighting requirements at the intersections.
- Establishing electrolier placement along Missouri Flat Road.
- Working with County and Caltrans during the design process to recommend and select decorative lighting standards to be installed on Missouri Flat Road.
- Identifying electrical service points.
- Drafting detailed design at 1:500 scale for lighting and sign illumination plans.
- Preparing special provisions.

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- Preparing a cost estimate for the lighting and sign illumination systems.
- Review by Engineer in responsible charge.
- Submitting preliminary PS&E.

Task 4.3 – Temporary Traffic Signal Design

Fehr & Peers will prepare plans, specifications and estimates (PS&E) for the design of temporary traffic signals for the four (4) intersections on Missouri Flat Road. The designs will include vehicle detection at each intersection during construction. Based upon the preliminary Stage Construction plans prepared for the Project Report, the following temporary signals will be required:

- Stage 2 Westbound Off ramp Intersection
- Stage 2 Westbound On Ramp Intersection
- Stage 3 Westbound Ramp Intersection
- Stage 3 Eastbound Ramp Intersection
- Stage 3 Mother Load Drive Intersection
- Stage 3 Prospector's Plaza Intersection
- Two additional temporary signal designs, to be determined

Each of these temporary signal designs will utilize permanent signal poles where possible and supplement them with temporary poles as needed.

Subtasks necessary for draft submittal include:

- Preparation of temporary traffic signal installation designs.
- Preparation of detailed design at 1:200 metric scale for temporary signal plans.
- Preparation of special provisions.
- Preparation of cost estimate for the temporary traffic signals.
- Review by Engineer in responsible charge.
- Submittal of preliminary PS&E.

Task 4.4 – Prepare Signal Timing Plans

Fehr & Peers will prepare signal-timing sheets for AM, PM, and off-peak hour conditions for the four (4) intersections on Missouri Flat Road. The signal timing plans will be prepared based on Caltrans specifications and will include all required parameters (i.e., cycle lengths, offsets, minimum green, passage time, pedestrian walking times, yellow interval, clearance phase, etc.) needed to operate the actuated-coordinated traffic signals. The plans will be submitted to Caltrans for review and comment. Comments will be incorporated and a final set of signal timing plans submitted for implementation. Fehr & Peers will also provide in-the-field technical assistance to Caltrans (if needed) when the traffic signals are turned on.

Task 4.5 – Prepare Ramp Metering Plans, Specifications and Estimate

Fehr & Peers will prepare draft plans, specifications and estimates (PS&E) for one ramp meter located at the U.S. 50 eastbound on ramp. Draft PS&E will be submitted to Caltrans and County for review and comment. Fehr and Peers will prepare final PS&E based on comments received from Caltrans and County.

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Task 4 Deliverables: PS&E for Signals, Lighting & Overhead Sign Lighting
PS&E for Ramp Metering

TASK 6 – STORM WATER POLLUTION PREVENTION PLANS AND EROSION CONTROL PLANS

WRECO, a listed subconsultant under this Agreement, will review relevant project data, provided by Consultant and will conduct a field reconnaissance. WRECO will prepare plans addressing construction and permanent water quality and erosion control issues. WRECO will prepare the necessary PS&E package and Storm Water Data Report in Caltrans required format including any specifics for District 3 and County's Storm Water Management Plan. WRECO will make two (2) submittals, a draft and a final, to Consultant and County. The draft Storm Water Data Report and Erosion Control/Water Pollution Control PS&E will be submitted along with the 95% PS&E, and the final Storm Water Data Report and EC/WPC PS&E will be submitted along with the Final PS&E.

Task 6 Deliverables: Storm Water Data Report
EC/WPC PS&E

TASK 7 – STRUCTURE DESIGN

Task 7.1 – Bridge Design

The final bridge designs will be performed in accordance with Caltrans Bridge Design Specifications and other Caltrans Design Manuals. Design will be based on the "Load Factor Design" method, with HS20-44 (including alternative) and permit truck design live loads. Seismic design will be performed in accordance with the Bridge Design Specifications and Caltrans Seismic Design Criteria Version 1.2. Plans will include construction staging as required to maintain traffic through the project site and bridge removal plans.

Task 7.2 - Bridge Detailing

The plan sheets will be prepared in CADD according to Caltrans' drafting standards. Plans will be prepared in metric units and will be consistent with Caltrans' *Standard Plans*. All plans will be signed by the civil engineer (registered in the state of California) in responsible charge of the design, in accordance with the Caltrans OSFP Guidelines. The Missouri Flat Road Overcrossing is expected to consist of a multi-span box girder structure and the Weber Creek Bridge will be widened in kind. It is assumed that the three (3) walls needed along the ramps will be Type 1 walls and the two (2) walls along the mainline will be tieback walls.

Consultant anticipates that the following types of structures plan sheets² will be needed. The anticipated number of plan sheets for each type is shown in parentheses.

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Highway 50/Missouri Flat Road Overcrossing	Highway 50 at Weber Creek Bridge Widen & Retrofit	Retaining Walls
<ul style="list-style-type: none"> ■ General Plan (1) ■ Deck Contours (1) ■ Foundation Plan (1) ■ Abutment Layout (2) ■ Abutment Details (3) ■ Retaining Wall Details (3) ■ Bent Details (3) ■ Typical Section (1) ■ Girder Layout (1) ■ Girder Details (1) ■ Deck Drainage Details (2) ■ Miscellaneous Details (2) ■ Approach Slab Details (2) ■ Stage Construction (1) ■ As-Built Log of Test Borings (1) ■ Log of Test Borings (1) to be prepared by Taber Consultants <p>Total Anticipated Sheet Count: 26²</p>	<ul style="list-style-type: none"> ■ General Plan (1) ■ Deck Contours (1) ■ Foundation Plan (1) ■ Abutment Layout (2) ■ Abutment Details (3) ■ Bent Details (3) ■ Typical Section (1) ■ Cross Frame Details (2) ■ Girder Layout (1) ■ Girder Details (2) ■ Restrainer Details (1) ■ Bridge Railing Details (1) ■ Deck Drainage Details (2) ■ Miscellaneous Details (2) ■ Stage Construction (1) ■ Approach Slab Details (1) ■ As-Built Log of Test Borings (3) ■ Log of Test Borings (3) to be prepared by Taber Consultants <p>Total Anticipated Sheet Count: 31²</p>	<ul style="list-style-type: none"> ■ Mainline-Westbound, Eastbound ■ General Plan (2) ■ Layout (5) ■ Ret. Wall Details (4) ■ Log of Test Borings (2) to be provided by Taber Consultants ■ Westbound Off-ramp, Westbound On-ramp ■ Eastbound Off-ramp ■ General Plan (3) ■ Layout (6) ■ Ret. Wall Details (2) ■ Aesthetic Details (2) ■ Log of Test Borings (3) to be provided by Taber Consultants <p>Total Anticipated Sheet Count: 29²</p>

Task 7 Deliverables: Draft Structure Plans (Unchecked Details)

TASK 8 – SUBMITTAL OF 65% PLANS (ROADWAY AND STRUCTURES)

The fully designed and detailed plans will be printed and submitted to County and Caltrans for review and comment in accordance with Caltrans Guidelines. Open communication between County’s staff, Caltrans’ review staff and Consultant’s design staff will provide all parties with the opportunity for input during the plan preparation stage. This will ensure that both roadway and bridge design parameters are adequately addressed. A meeting will be held upon completion of the unchecked bridge details to discuss both the bridge and the roadway plans. (This should save considerable time in County’s review of the Draft PS&E because most of the major issues will have been previously discussed and addressed.)

This task also includes budget for Consultant’s Project Manager and Project Engineers to attend a Caltrans Constructibility Review Meeting.

**Task 8 Deliverables: 65% Plans (25 sets of 11”x17” plans)
Constructibility Review Meeting
Progress Meeting**

TASK 9 – INDEPENDENT DESIGN CHECK

Upon completion of the unchecked details, an independent check of the design will be performed. An engineer that has not been intimately involved in the design will perform a completely independent analysis of the project using the unchecked bridge detailed plans and 65% roadway plans. (This is an important part of the Team’s QA/QC Plan and is identical to Caltrans’ process.)

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Based upon the independent check and agreement to revisions by the checker and designer, the plans will be revised.)

Task 9 Deliverables: Independent Check Calculations Signed by Registered Engineer

TASK 10 – UTILITY RELOCATION

Consultant will perform a utility investigation and coordinate with utility owners throughout the project development process in order to determine the extent of any utility conflicts and identify potential project delays to the project due to utility company reviews or relocations. Consultant will prepare utility relocation requirement plans. These utility relocation requirement plans will consist of identifying all utilities in conflict with proposed work that will require relocation and identify where the utilities can be relocated. Consultant will set up a meeting with the City, County, Caltrans and local utility agencies/companies to present the proposed project and request utility verification. It is assumed that each utility company will be responsible for developing the actual relocation plans. Consultant will incorporate appropriate data on the final contract plans.

Notification letters and plan sets will be provided to utility owners at three (3) stages known as the ABC plan process during PS&E development of Interchange as follows:

"A" Plan Submittal to Utility Companies

Consultant will prepare draft transmittal letters to affected utility owners for County review and approval prior to transmitting "A" Plans to utility owners. Two (2) sets of base maps or "A" plans will be provided to each utility owner as an attachment to the transmittal letter. Information on existing utilities obtained as a result of the "A" plan submittal will be transferred to base maps.

"B" Plan Submittal to Utility Companies

Consultant will prepare draft transmittal letters (Utility verification and Notice to Owners) to affected utility owners for County review and approval prior to transmitting "B" Plans to utility owners. Two (2) sets of half-size 65% plans or "B" plans will be provided to each utility owner as an attachment to the transmittal letter. The letter will request that utility owners verify any utility conflicts with proposed improvements and indicate whether any future utilities are proposed in the area that may require accommodation through the improved area. Information on existing utilities obtained as a result of the "B" plan submittal will be used to determine potential utility conflicts and to resolve the conflicts identified. In addition, future utility needs identified by the utility companies will be incorporated into the plans.

"C" Plans Submittal to Utility Companies

Consultant will prepare draft transmittal letters to affected utility owners for County review and approval prior to transmitting "C" Plans to utility owners. Two (2) sets of half-size 100% plans or "C" plans will be provided to each utility owner as an attachment to the transmittal letter. The letter will indicate to the utility owners whether any changes have

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been made to the project plans since the "B" plans submittal and will request written confirmation of utility relocations and utility relocation schedule.

Task 10 Deliverables: Utility Relocation Plans and Notices utilizing the ABC Plan Process

TASK 11 – TECHNICAL SPECIFICATIONS

The Team will develop the bridge and roadway technical special provisions based on Caltrans *Standard Special Provisions* (SSP) to be incorporated as Sections 8, 9, and 10 of the construction special provisions. Consultant will merge the technical specifications provided by each subconsultant into a single set of technical specifications. Consultant will provide a hard copy and disc copy of the specifications for County and Caltrans review. Special provision files will be developed on a Windows operating system and in a file format compatible with Caltrans. It is assumed that Caltrans Office Engineer will add the "boilerplate" specifications to the project specifications provided by Consultant.

Task 11 Deliverables: Technical Special Provisions

TASK 12 – CONSTRUCTION QUANTITIES AND ESTIMATE

Consultant will also prepare construction quantities and a construction cost estimate (Q and E). Quantities will be developed in accordance with standard Caltrans pay items in BEES (Basic Engineer's Estimating System). Caltrans Construction Cost Database will be used to estimate item prices. Project estimates will show individual quantities and costs as well as a project cost summary, including appropriate supplemental work items and contingencies.

**Task 12 Deliverables: Quantities
Engineer's Estimate**

TASK 13 – CONSTRUCTION SCHEDULE

Consultant will prepare a construction schedule to estimate the number of working days to be included in the construction contract. The schedule will be done using Microsoft Project, unless County or Caltrans prefers another format. The schedule will also be provided to the Resident Engineer for use during construction.

Task 13 Deliverables: Construction Schedule

TASK 14 – QUALITY CONTROL AND CONSTRUCTIBILITY REVIEW

As an integral part of Consultant's QA/QC Program, a senior level engineer (acceptable to County) will review the entire draft PS&E (95% PS&E) package for uniformity, compatibility and constructibility as well as conformance with the Project Report.

The review will include comparing bridge plans with the roadway plans for conflicts or inconsistencies, and to ensure that the final design is in accordance with all environmental documents, permit requirements, hydraulics reports and foundation recommendations. The specifications and estimate will be reviewed for consistency with the plans, and to ensure that

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each construction item has been covered, units and terminology are consistent and to assure the product is biddable and buildable.

In addition, this task includes attendance by the Project Manager, Roadway Project Engineer and Bridge Project Engineer at a Caltrans Safety Review Meeting and Constructibility Review Meeting.

Task 14 Deliverables: QA/QC and Constructibility Review

TASK 15 – DRAFT PS&E (90%) SUBMITTAL

The plans, specifications and estimate, along with design, check and quantity calculations will be submitted to County and Caltrans at the 90% completion stage. Consultant will conduct a Draft PS&E adjudication meeting to review the submittal with Caltrans. Consultant will incorporate the review comments into the final PS & E and provide a summary of responses to the comments.

Task 15 Deliverables: Provided at 90% PS&E will be:

- 25 sets of 11"x17" plans (roadway and structures)
- 25 copies of draft special provisions
- 25 copies of engineer's estimate

Provided to Caltrans Division of Structures for the structures portion of the project will be:

- 5 sets of 11"x17" plans
- 2 copies of quantity and quantity check calculations
- 2 copies of special provisions
- 2 copies of engineer's estimate
- 1 copy of design calculations
- 1 copy of independent check calculations

FINAL PLANS, SPECIFICATIONS AND ESTIMATE

This phase incorporates comments from draft PS&E and produces final PS&E ready for advertisement. Upon receiving comments from Caltrans and County, each comment will be reviewed, discussed and addressed in writing. All apparent conflicts will be resolved in person via telephone or fax as necessary.

TASK 16 – FINALIZE PLANS, SPECIFICATIONS AND ESTIMATE

The Consultant Team will finalize roadway and structure plan sheets based upon response to meaningful comments received from the Draft PS&E submittal. The Consultant Team will finalize the technical specifications and the quantity calculations for both the roadway and bridge plans and prepare the final BEES estimates. The final plans, specifications and estimate will be submitted to Caltrans for advertisement. The plans and specifications will be signed by a registered engineer. Full-sized (vellum) and half-sized contract plans as well as hard copy and computer files (MS Word format) of special provisions (for bidding purposes) will be provided.

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Exhibit A

Base Scope of Work



Task 16 Deliverables: Final Plans, Specifications and Estimate signed by a Registered Engineer as follows:

- 1 Electronic file for each plan sheet in Microstation format
- 1 set (vellum) of signed 22" x 34" final plans
- 20 sets (bond) of 11"x17" final plans
- 1 electronic file formatted special provisions
- 1 Hard Copy of Final Special Provisions

TASK 17 – PREPARE RESIDENT ENGINEER’S FILE

Consultant will prepare the Resident Engineer’s (RE) File in accordance with the Caltrans *Construction Manual*. Included in this file will be any notes from the designer regarding unusual or unique items and any other information of which the Resident Engineer should be made aware.

Task 17 Deliverable: Resident Engineer’s File

TASK 18 – PREPARE SURVEYOR’S FILE

Consultant will prepare the Surveyor’s File including copies of all survey staking notes for both finished sub-grade and final roadway grade, and copies of alignments and calculations.

Task 18 Deliverable: Surveyor’s File

RIGHT-OF-WAY PHASE

TASK 21 – RIGHT-OF-WAY ENGINEERING

Task 21.1 – Right-Of-Way Engineering Coordination

This task provides up to ninety-six (96) hours for coordination with County Right-of-Way Engineering staff to assist in the development of Right-of-Way Plats and Legal Descriptions. Task 21.2 is an optional task (see Exhibit B), not included in the base budget, and is available in the event that County forces are unable to provide timely delivery of these tasks. In the event that County requests the Consultant team to perform these optional tasks, the Consultant hours provided here would be utilized to coordinate with TSI, a listed subconsultant under this Agreement.

Task 21.1 Deliverables: R/W Engineering Coordination

TASK 22 – RIGHT-OF-WAY APPRAISAL AND RELATED TASKS

Task 22.1 – Engineering Coordination for R/W Appraisal and Related Tasks

This task provides for Consultant’s coordination efforts with either County or Bender Rosenthal, Inc. (BRI), a listed subconsultant under this Agreement, to appraise and acquire twenty-six (26) Fee Takes and nine (9) Construction Easements. The coordination involves working with the

Quincy Engineering, Incorporated

Exhibit A

Base Scope of Work



agents and property owners to answer questions related to the design of the project and the associated right-of-way needs.

This scope does not include hours for condemnation procedures such as first and second level hearings prior to the adoption of resolution of necessities, and such efforts shall be subject to contract amendment.

Task 22.1 Deliverables: R/W Appraisal and Acquisition Engineering Coordination

Task 22.2 – Appraisal Services

BRI will develop complete appraisals that will state the estimated market value of the fee simple interest in each referenced property, before and after the planned taking. The reports will be summary appraisal reports that will be prepared in conformance with and subject to the requirements of the Code of Professional Ethics and the Standards of Professional Practice of the Appraisal Institute, which fully incorporate the Uniform Standards of Professional Appraisal Practice (USPAP) of the Appraisal Foundation. County will provide current title reports and will be responsible for opening escrow accounts.

Task 22.2 Deliverables: Appraisals for nine (9) Temporary Construction Easements
Appraisals for twenty-six (26) Fee Takes

Task 22.3 Independent Appraisal Review

In accordance with federal regulations, a qualified reviewing appraiser shall examine all appraisals to assure that they meet applicable appraisal requirements and shall, prior to acceptance, seek necessary corrections or revisions. In addition, the review appraiser shall determine that the estimate of fair market value is reasonably supported by an acceptable appraisal. BRI is pleased to include Mr. Mike Lahodny as the independent reviewer for the project. BRI will ensure the appraisals meet all federal and Caltrans regulations.

Task 22.3 Deliverables: Independent review and approval of thirty-five (35) appraisals

PRE-CONSTRUCTION PHASE

Construction Bidding

While the project is being advertised for bids by County or Caltrans, all questions concerning the intent shall be referred to County or Caltrans Oversight Engineer for resolution. In the event that any items requiring interpretation in the drawings or specifications are discovered during the bidding period, said items shall be analyzed by Consultant for decision by County and Caltrans as to the proper procedure required. Corrective action taken will either be in the form of an addendum prepared by Consultant and issued by County or Caltrans, or by a covering change order after the award of the construction contract.

Quincy Engineering, Incorporated

Exhibit A

Base Scope of Work



TASK 23 – RESPOND TO BIDDERS’ INQUIRIES

Consultant will respond to bidders’ inquiries as requested by Caltrans and County. Up to twenty (20) hours of effort is provided for this task in the budget.

Task 23 Deliverables: Response to Bidder’s Inquiries

TASK 24 – PREPARE ADDENDA

Consultant will prepare addenda as requested by County or Caltrans and approved by County (this task is limited to forty (40) hours of effort). In the event that changes to the bid documents are required as a result of an oversight by Consultant, these changes will be developed at no cost to County. In the event that the requested addendum requires greater effort, the additional scope would be subject to approval of an amendment by County.

Task 24 Deliverables: Addenda, if required

TASK 25 – AWARD RECOMMENDATION

Consultant will review the bid results and provide recommendations for awarding the contract.

Task 25 Deliverables: Bid Analysis and Recommendation

Construction Support is not included in the base scope.

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Exhibit B

Optional Tasks Scope of Work



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Optional Tasks Scope of Work

U.S. Highway 50/Missouri Flat Road Interchange Project
Phase 1 – Engineering & Environmental Planning, Design & Project Delivery Services

The following Optional Tasks Scope of Work is provided to define the scope of work for various tasks which may or may-not be required under this Agreement. At the time that tasks are determined by the Contract Administrator to be necessary, a Task Order will be written in accordance with Article I paragraph B of the Agreement. Each Task Order will clearly define the scope of work to be performed as well as the not-to-exceed dollar amount to be paid for the work performed under the Task Order. The scope of work and amount of the Task Order may be altered from those defined in this Exhibit, but shall be in general conformance with the intent of the item.

DESIGN PHASE

Task 2.1.5 – Supplemental Stage I Aerially Deposited Lead Analytical Testing

This optional task is to supplement the ADL testing completed in Task 2.1.4 (see Exhibit A) and will only be needed if the results from the previous testing indicate a need for additional testing for Stage I if required, as indicated.

ANALYTICAL TESTING

Proposed supplemental analytical testing will include:

- All samples with 50 mg/kg or more total lead will be tested for soluble lead by EPA method 6010 using the WET test extraction method with citrate buffer. The base scope in Task 2.1.4 (see Exhibit A) tested the first two hundred (200) samples. If more than two hundred (200) samples indicate 50 mg/kg or more total lead, or if the correlation coefficient (“r”) calculated to quantify the variation between the total and soluble lead results does not indicate a suitable correlation (i.e. “r” greater than about 0.7 to 0.8), the initial analyses will be supplemented by analyzing all samples for soluble lead using WET extraction. This scope provides for four hundred (400) additional tests.

Task 2.1.5 Deliverables: **Stage I Supplemental ADL Testing**

Task 2.1.6 – Stage II Aerially Deposited Lead Sampling and Analytical Testing

This optional task is to supplement the ADL sampling completed in Task 2.1.4 (see Exhibit A) and will only be needed if the results from the previous testing indicate a need for additional sampling and analytical testing as indicated.

STAGE II

Stage II sampling will be performed only if results of the Stage I sampling and analyses indicate the potential presence of elevated total lead concentrations (>50 mg/kg) below 1 m (3 feet) deep or if required by Caltrans. Stage II sampling will be performed at structure foundation locations designated for geotechnical exploration – fifteen (15) retaining wall borings and three (3) overcrossing borings. At each location, samples will be collected at approximately 1.5 m (5 feet) deep and each additional 1.5 m (5 feet) depth interval to the full depth of proposed foundation excavations (assume 6 m/20 feet maximum for walls; 10 m/30 feet maximum for Missouri Flat Road Overcrossing). Sampling is assumed to be performed concurrently with geotechnical sampling. A maximum of up to eighty (80) samples are anticipated.

Although not yet thoroughly defined, cuts deeper than 1 m (3 feet) are expected in an area of existing cut along the eastbound shoulder of U.S. Highway 50 from about Sta. 140+88 to 144+20. However, the risk of elevated lead concentrations below 1 m (3 feet) is considered very low and it is expected lead content of these materials can be adequately characterized by the Stage I sampling. Although the possibility that deeper samples will be required cannot be ruled out, such sampling is not included in the proposed scope. Sampling is not expected to be required at Webber Creek Bridges support locations.

ANALYTICAL TESTING

Caltrans District 3 does not have a DTSC variance for on-site disposal of lead-contaminated soil and analytical testing will be limited to evaluating whether offsite disposal is necessary. The testing will include testing for total lead, soluble lead using WET extraction (WET testing), soluble lead using TCLP extraction (TCLP testing) and pH. Proposed analytical testing will include:

- All samples will be tested for total lead by EPA method 6010, using metals extraction by EPA method 3050A. The budget provides for eighty (80) samples to be tested.
- All samples with 50 mg/kg or more total lead will be tested for soluble lead by EPA method 6010 using the WET test extraction method with citrate buffer. Consultant has assumed eighty (80) samples will be tested in this optional task.
- pH analyses will be performed for ten percent (10%) of samples. This scope provides for up to eight (8) samples to be tested for pH using EPA method 9045.

Task 2.1.6 Deliverables: Stage II Supplemental ADL Sampling and Testing

Task 2.3.3 – Additional Operational Evaluations to Identify Other Improvements at Nearby Interchanges and Intersections Needed for Traffic Handling During Construction

Fehr and Peers will prepare the following operational analysis of the construction phasing to identify other projects that County may need to implement to maintain acceptable levels of service in the corridor (note, this scope should be done early enough in the design phase to allow County to implement the recommendations prior to construction of the interchange):

Fehr and Peers will collect new a.m. peak hour, mid-day peak hour and p.m. peak hour turning movement counts at the following four (4) study intersections.

1. Missouri Flat Road/El Dorado Road
2. Missouri Flat Road/Headington Road
3. El Dorado Road/U.S. 50 Westbound Ramps
4. El Dorado Road/U.S. 50 Eastbound Ramps

The counts will be for two hour periods (i.e., 7-9 a.m.) and be organized by 15-minute increment. Fehr & Peers will also conduct one (1) field visit to verify intersection lane configurations, traffic control and signal timing.

A SYNCHRO model will be set up to analyze peak hour traffic operations at the four (4) additional study intersections. This task will include the initial model set up and analysis of existing conditions. The model will be validated to replicate field observations of peak hour operations (i.e., maximum queues). The analysis results will provide peak hour delay estimates and corresponding level of service (LOS) for each intersection. In addition, critical queues will be identified and reported. Fehr and Peers will develop turning movement forecasts for up to three (3) construction stages at the Missouri Flat Road Interchange. These forecasts will reflect travel demand changes resulting from construction modifications of existing intersections or roadways. This effort is expected to be limited to traffic shifts based on the detailed construction staging plans.

Fehr and Peers will analyze a.m. peak hour, mid-day peak hour and p.m. peak hour traffic operations at the four (4) additional study intersections for up to three (3) construction stages. The analysis results will provide peak hour delay estimates and corresponding LOS for each intersection. In addition, critical queues will be identified and reported. Improvement recommendations to reduce projected delays and queuing will be developed in cooperation with the project team. Where possible, County's minimum LOS threshold will be maintained.

The operations analysis done under this optional task will be documented in a technical memorandum that describes the results and recommendations. Up to four (4) hours of staff time has been budgeted to respond to comments on the memorandum.

Task 2.3.3 Deliverables: Additional Operational Evaluations



Task 4.6 – Prepare Traffic Operations System Plans, Specifications and Estimate

Fehr & Peers will prepare draft plans, specifications and estimates (PS&E) for one (1) traffic monitoring station and one (1) Closed Circuit Television (CCTV) camera system. The traffic monitoring station and CCTV camera will be located as specified by Caltrans. PS&E will be submitted to Caltrans and County for review and comment. Fehr and Peers will prepare final PS&E based on comments received from Caltrans and County.

Task 4.6 Deliverables: PS&E for Operations Systems

TASK 5– POTHOLING OF HIGH RISK UTILITIES

As part of the base project, Consultant will review the existing utilities within the construction area for the project and identify which utilities require potholing as required by the Caltrans High and Low Risk Utility policy.

If potholing is required, Consultant will work with County to establish potholing locations. Subtronic Corporation (Subtronic), a listed subconsultant under this Agreement, will provide vacuum excavation utility location (potholing) and associated surveying for up to twelve (12) pothole locations.

The utility will be exposed using vacuum excavation. The point of excavation will be as determined by markings provided by Underground Services Alert (USA). USA will be called for markings forty eight (48) hours in advance of scheduled work. Note that Subtronic is not responsible for errors in the markings provided by USA. If the markings are not accurate, Subtronic may be required to vacuum excavate additional holes to locate the utility. These additional holes will be counted against the budgeted twelve (12) holes and may trigger additional budget being required to complete the project. County will be notified immediately upon any inaccurate markings found.

Subtronic will be granted permission to access and locate utilities on both public and private rights-of-way, and such permission will be acquired by County.

Areas within roadway sections will be neatly cut at approximately twelve (12) inch square. Excavated material will be removed from the site and the pothole backfilled with Controlled Density Fill (CDF) and surface cold asphalted where applicable. In the event that any of these locations are not within the areas to be repaved as part of the interchange reconstruction project, Consultant will work with County to locate the holes immediately outside the paved area or will identify an acceptable backfill method. This will be determined when County authorizes this optional task, if needed, and the scope will be adjusted accordingly.

Once exposed, the top of the utility facility will be surveyed for horizontal and vertical location utilizing survey control provided by County. County will provide survey control within five hundred (500) feet of each potholing location. Subtronic will install a PK nail or stake directly above the utility for future use.

Subtronic will be responsible for traffic control needed for its operation (it is assumed that no pothole locations will be needed within the State right-of-way). Subtronic will also obtain permits needed to conduct its operation and site clean-up.

Consultant will incorporate the utility location data into the plans per Caltrans policy.

Task 5 Deliverables: Potholing High Risk Utilities (Up to twelve [12] holes)



Task 11.1 – Complete Specifications

In the event that County decides to advertise, award and administer the Construction Contract, this optional task would supplement Task 11 (see Exhibit A) as follows:

Consultant will prepare the Ready to Advertise Specification Booklet based upon Caltrans Boiler Plate Specifications and complemented by County Boiler Plate Specifications. County will provide an electronic copy of County's standard Bid Package Specifications in Microsoft Word Format. Consultant will merge these County Boilerplate Specifications into the Standards Caltrans Package. It is understood that the prevailing standards will be Caltrans and the package will follow Caltrans format to assure the final Bid Package is approvable by Caltrans. Consultant will provide a hard copy and disc copy of the Bid Package for County and Caltrans review. These files will be developed on a Windows operating system and in a file format compatible with County and Caltrans. County will be responsible for printing and distributing the Bid Documents.

Task 11.1 Deliverables: Bid Specification Package Ready for Advertisement

TASK 19 – ENVIRONMENTAL DESIGN

Task 19.1 – Prepare a Riparian Restoration Tree Replacement and Landscaping Plan

The preferred alternative would result in the removal or disturbance of riparian forest adjacent to Weber Creek and blue oak woodland along Missouri Flat Road, near the Missouri Flat Road interchange, and near Weber Creek. Jones & Stokes, a listed subconsultant under this Agreement, will prepare stand-alone construction documents (i.e., plans and specifications) for the riparian restoration area and for tree replacement and interchange landscape planting areas. The construction documents will include information related to site preparation for the revegetation areas, planting, irrigation and short-term maintenance during the plant establishment period (refer to "Assumptions for Task 19.1"). Preparation of the stand-alone construction documents will include the subtasks listed below.

Riparian Forest Mitigation

The preferred alternative would result in the removal or disturbance of approximately 0.1 hectare (0.25 acre) of Weber Creek, approximately 0.29 hectare (0.71 acre) of white alder riparian forest vegetation adjacent to Weber Creek during construction of improvements to the Weber Creek bridges. The Biological Opinion for this project issued by the USFWS (December 9, 2003) indicates that woody riparian vegetation should be replaced at a minimum of a 1:1 ratio (1 acre planted for every 1 acre removed).

Mitigation Measure BR3c: Enhance Riparian Habitat by Developing and Implementing a Riparian-Restoration Plan includes developing an onsite restoration plan for the restoration and enhancement of riparian habitat. The plan, as described in this scope of work, will focus on restoring riparian habitat along Weber Creek in the construction area footprint (i.e., approximately 0.71 acre). Enhancement of riparian habitat will be accomplished through the removal of invasive species (e.g., black locust and Himalayan blackberry) that occur on the project site and their replacement with native riparian species. This scope of work assumes that

riparian habitat affected by project construction will only be replaced onsite in its original location within the construction footprint and that no additional enhancement areas will be required.

Tree Replacement Mitigation

The preferred alternative will result in the removal or disturbance of up to 8–12 hectares (20–30 acres) of blue oak woodland, including several native blue oaks, foothill pines and interior live oaks (outside of the blue oak woodland habitat). The preferred alternative will change the viewsheds in roadside landscape units associated with the project. Jones & Stokes will assist County in implementing *Mitigation Measure BR5a: Minimize and Compensate for Impacts on Blue Oak Woodland and Individual Native Oak Trees by Replanting Oaks* and the replanting guidelines specified under *Impact VR3: Changes in Views of Landscape Units 3, 4, 5, and 6*. The tree replacement and interchange landscape plan will incorporate the revegetation measures required to mitigate for effects to oak woodland and existing viewsheds.

County will reduce long-term impacts on the blue oak woodland and native oak trees by implementing several mitigation measures. Mitigation Measure BR5a specifically addresses impacts to oak woodland and requires the minimization of and compensation for impacts to oak woodlands and native oaks. County is required to replace native oak trees measuring greater than 15.2 centimeters (6 inches) in dbh that are removed during construction, at a ratio of 3:1 for trees (Dan Burmester, California Department of Fish and Game, pers. comm). Plantings of acorns or one-gallon container stock will occur within the construction area or on other publicly-owned land that can be protected in perpetuity, such as publicly-owned parks and road right-of-ways.

Jones and Stokes will provide County with required project mitigation to reduce impacts on viewsheds in landscape units 3, 4, 5 and 6 by developing a landscape plan for the new interchange to reduce the mass and visually screen the proposed interchange improvements. The replanting of vegetation within the U.S. 50/Missouri Flat Road interchange would be consistent with provisions of Caltrans' existing viewshed enhancement projects along U.S. 50. This vegetative buffer would be designed to include a landscape plan, irrigation plan and maintenance guidelines.

This scope of work assumes that the native oaks affected by project construction will be replaced at the following locations:

- Within the construction zone along Missouri Flat Road;
- Within the construction zone on the embankment of Highway 50, adjacent to and under the Weber Creek bridges; and
- Within the interchange landscaped areas.

Task 19.1.1 – Mobilize for Project Startup

Jones & Stokes will attend a project startup meeting and gather existing site-specific information from Consultant and County, including:

- Digital and hard copy maps that identify habitat mapping in the project area.
- Base map topography (1.0 contour interval).

- Digital and hard copy construction drawings for detailing roadway improvements and existing and proposed site conditions.
- Most recent digital aerial photograph data available.
- Creek cross-sections for onsite mitigation area (existing and proposed).
- Geotechnical report, including groundwater and riparian vegetation survey information.

Also, any other in-house data pertinent to the site and project mitigation will be reviewed.

This scope of work assumes that the final bridge and roadway construction documents will be completed and approved before work on the revegetation construction documents begins. The bridge and roadway construction drawings will serve as the base map for the revegetation construction documents.

Task 19.1.2 – Confirm Restoration Project Goals and Objectives

Jones & Stokes will meet with Consultant, County and resource agencies to confirm mitigation goals and objectives for the onsite mitigation area. This will ensure that initial preparation of the construction documents will be coordinated with County and with requirements set forth in the mitigation measure and the Biological Opinion. Task 19.1.2 will include the following:

- Develop draft restoration project goals and objectives based on mitigation measures identified in the final NES.
- Meet with Consultant, County and resource agencies to confirm mitigation project goals and objectives.
- Finalize goals and objectives based on comments received during the meeting.
- Distribute final restoration goals and objectives memorandum electronically to meeting participants via email.

Task 19.1.2 Deliverables: Draft Restoration Project Goals and Objectives Memorandum
Final Restoration Goals and Objectives Memorandum and
Meeting Minutes

Task 19.1.3 – Conduct Site Inventory and Analysis for the Onsite Mitigation Area

Following completion of Subtask 19.1.2, Jones & Stokes will conduct a site visit to collect field note information important to preparation of the conceptual plan. Jones & Stokes will confirm in the field that existing habitat conditions have not changed since original habitat mapping and other project-related mapping was conducted. As part of the site inventory, Jones & Stokes will confirm if local hydrology and soil conditions will support riparian species.

This task assumes that County will stake the perimeter of the onsite mitigation area (i.e., the proposed construction area, staging areas, and access routes that will affect riparian vegetation) before the site inventory is conducted.

Task 19.1.3 Deliverables: Provide Memorandum of Inventory and Analysis of Site

Task 19.1.4 – Prepare 30% Design Construction Documents

Jones & Stokes will prepare draft construction documents equivalent to a 30% design submittal for the riparian revegetation, tree replacement planting areas, and interchange landscaping. The draft construction documents will be based on the project goals and objectives identified in Task 19.1.2 and will include the following activities:

- The 30 percent construction documents will develop the project goals and objectives into landscape architecture plan drawings, cross sections, details and specifications.
- Prepare plan drawings that:
 - Are consistent with County, Caltrans and federal standards
 - Have a drawing scale appropriate to communicate the physical relationships of design elements
 - Have a sheet scale standardized to 24" x 36" (assume 8 sheets)
 - Are prepared using Microstation software.
- Prepare specifications. To complement the 30% plan drawings and communicate the level of quality required during construction, relevant technical sections of construction specifications will be prepared consistent with County and Caltrans standards. These sections will address site preparation, planting, irrigation and short-term maintenance.
- Prepare preliminary cost estimate. The spreadsheet itemizing estimates for construction costs will include a brief description, identification of the relevant unit, unit cost and an extended cost for each item of construction.
- Meet with Consultant, County and Caltrans to discuss 30% construction documents. No meeting summary will be prepared; instead, comments will be discussed at the meeting and outcomes of the discussion will be reflected in the 65% construction documents.

Task 19.1.4 Deliverables: 30 % Draft Plans, Specifications and Estimate

Task 19.1.5 – Prepare Draft Construction Documents (65% Submittal)

Jones & Stokes will prepare draft construction documents equivalent to a 65% design submittal for the riparian revegetation, tree replacement planting areas and interchange landscaping. The draft construction documents will be based on the final conceptual plan and will include the following activities:

- Conduct a site visit to collect more detailed information and field check final design solutions.
- Prepare plan drawings that:
 - ◆ Are consistent with County, Caltrans and federal standards.
 - ◆ Have a drawing scale appropriate to communicate the physical relationships of design elements.

- ◆ Have a sheet scale standardized to 24" x 36" (assume approximately 32 sheets).
- ◆ Are prepared using Microstation.
- Prepare specifications. To complement the 65% plan drawings and communicate the level of quality required during construction, relevant technical sections of construction specifications will be prepared consistent with County and Caltrans standards. These sections will address site preparation, planting and seeding, irrigation and maintenance.
- Prepare preliminary cost estimate. The spreadsheet itemizing estimates for construction costs will include a brief description, identification of the relevant unit, unit cost and an extended cost for each item of construction.
- Meet with Consultant, County and Caltrans to discuss draft construction documents. No meeting summary will be prepared; instead, comments will be discussed at the meeting and outcomes of the discussion will be reflected in 90% construction documents.

Task 19.1.5 Deliverables: 65% Draft Plans, Specifications, and Estimate

Task 19.1.6 – Prepare Final Construction Documents (90% Submittal)

Jones & Stokes will prepare 90% construction documents for the riparian revegetation, tree replacement planting areas and interchange landscaping. The final construction documents will be based on comments received on the draft construction documents. This task will include the following activities:

- Prepare final construction documents based on 65% draft construction documents (see Task 19.1.5). 90% construction documents will include the same plan drawings, cross-sections, details and specifications at an approximately 90% level of completion. Applicable review comments on the 65% draft construction documents from Consultant, County and resource agencies will be incorporated into 90% construction documents.
- Prepare draft cost estimate.
- Provide one (1) hard copy and an electronic copy of draft construction documents.
- Meet with Consultant and County to discuss final construction documents. No meeting minutes will be prepared; instead, comments will be discussed at the meeting and outcomes of the discussion will be reflected in revised final construction documents.

Task 19.1.6 Deliverables: 90% PS&E

Task 19.1.7 – Prepare Draft Version of Final Construction Documents (100% Submittal)

Jones & Stokes will prepare a draft version of the final construction documents for the riparian revegetation, tree replacement planting areas and interchange landscaping that will be equivalent to a 100% design submittal. The draft construction documents will be based on comments received on the 90% design submittal construction documents. This task will include the following activities:

- Prepare a draft version of the final construction documents based on comments received on the 90% construction documents (see Task 19.1.6). Revised final construction documents will include the same plan drawings, cross-sections, details and specifications at a 100% level of completion. Applicable review comments on final construction documents from Consultant and County will be incorporated into the revised final construction documents.
- Prepare final cost estimate.

Task 19.1.7 Deliverables: 100% PS&E

Task 19.1.8 – Prepare Final Construction Documents (Signed Documents)

Jones & Stokes will revise the draft version of the final construction documents for the riparian revegetation, tree replacement planting areas and interchange landscaping that will be equivalent to a 100 percent design submittal. This task will include the following activities:

- Prepare the final construction documents based on comments received on the draft version of the final construction documents (see Task 19.1.7). Revised final construction documents will include the same plan drawings, cross-sections, details and specifications at a 100% level of completion. Applicable review comments on final construction documents from Consultant and County will be incorporated into revised final construction documents.
- Prepare final cost estimate.
- Provide one (1) hard copy (stamped by a Jones & Stokes California-licensed landscape architect) and an electronic copy of revised final construction documents to Consultant for inclusion in a larger submittal.

Task 19.1.8 Deliverables: Final Plans signed by Registered Landscape Architect
Technical Specifications
Final Estimate

Task 19.1.9 – Complete Specifications

The preparation of the riparian revegetation, tree replacement planting areas and interchange landscaping construction documents, as described above include technical specifications related to planting, irrigation and short-term maintenance. Subtasks 19.1.1 to 19.1.8 do not include the preparation of Division 0 and Division 1 specifications. Jones & Stokes proposes this optional subtask to include the preparation of Division 0 and Division 1 specification sections that combine the Caltrans and County specifications into Caltrans format. In addition, this task will include modifying the boiler-plate standard specifications to make them project specific and preparing a ready-to-advertise specifications booklet.

Task 19.1.9 Deliverables: Bid Specification Package Ready for Advertisement

Task 19.2 – Conduct an Arborist Survey and Prepare an Arborist Report

The preferred alternative will result in the removal or disturbance of up to 8–12 hectares (20–30 acres) of blue oak woodland, including several native blue oaks, foothill pines and interior live oaks (outside of the blue oak woodland habitat). Jones & Stokes will assist County in

implementing *Mitigation Measure BR5a: Minimize and Compensate for Impacts on Blue Oak Woodland and Individual Native Oak Trees by Replanting Oaks.*

A Jones & Stokes certified arborist will conduct a tree survey in accordance with County guidelines, and in coordination with a County or local-government arborist. The tree survey will include a determination of the accurate location, number, species and size (diameter measured 4.5 feet above the ground, approximate height and approximate canopy diameter) for all native and nonnative trees with a diameter at breast height (dbh) of 6 inches or more in diameter. A rating of overall health and vigor will also be determined for each specimen, and each tree will be tagged with an individual identification number.

During field surveys Jones & Stokes will use a hand-held GPS unit to identify the location of each tree. In the event that GPS coverage is not available in the Weber Creek drainage area, Jones & Stokes will field mark the location of each tree and corresponding tree number on an aerial photograph. Each tree will be individually tagged with a metal tag that is consecutively numbered. It is assumed that color aerial photographs (1"=50') will be provided by County. It is assumed that the number of trees is fewer than five hundred (500). For those tree locations where a GPS cannot be used due to vegetative cover or topography, Jones & Stokes will identify the tree locations using a traditional total station survey method. This method will reference a control network of permanent and/or temporary benchmarks (TBM's) that will be established by others in adjacent areas where GPS coverage is available (for bridge design and construction).

Before conducting tree surveys, Jones & Stokes will meet with Consultant and County to identify areas of potential impact within the project boundary and to more accurately determine what areas and parcels require a tree survey. For the purpose of this scope of work, it is assumed that surveys will be performed in the following locations:

- Areas designated as riparian forest and blue oak woodland, as shown on Figure 3.8-1 in the Draft EIR/EA
- Areas designated as ornamental landscape along the Highway 50 corridor (ramps), as shown on Figure 3.8-1 in the Draft EIR/EA

This scope of work does not include surveys in developed areas or landscaped areas outside of the Highway 50 corridor. It is assumed that County will coordinate access to all survey areas in public and private ownership. This task assumes that County will stake the perimeter of construction area staging areas, and access routes that will affect oak woodland vegetation before the arborist survey is conducted.

Tree survey results will be documented in an arborist report, including a general qualitative description of the vegetative community, the survey methods and quantified survey results. The report will also include a digital map of the site, including the identification number of each tree. The digital map will be developed from an electronic file as provided by Consultant and field-verified by Jones & Stokes. Jones & Stokes will download the GPS data and digitize mapped tree locations. Tree location maps will be provided to Consultant in electronic format.



Jones & Stokes will prepare one (1) draft version consisting of three (3) hard copies of the arborist report for review by Consultant and County. Consultant will revise and finalize the arborist report based on comments received from County, and provide a total of three (3) hard copies of the final arborist report.

Task 19.2 Deliverables: **Draft Arborist Report (3 hard copies)**
 Final Arborist Report (10 hard copies)

TASK 20 – PUBLIC OUTREACH DURING DESIGN

Task 20.1 – Project Web Page

Consultant recommends developing a project web page as an additional public outreach component to keep the public informed throughout the duration of the project. The Hoyt Company, a listed subconsultant under this Agreement, has an in-house graphic designer that will work with County's webmaster to design and lay out the page to meet County standards. The web page will be linked to both the County's web site and the El Dorado County Transportation Commission web site. The Hoyt Company will also coordinate with the 50 Corridor TMA to create a link to this project web page.

The purpose of the web page is twofold:

- To provide a low cost, easily accessible way to disseminate information to the general public about the Project.
- To provide access to study documents and reports that members of the general public may find beneficial.

During the eighteen (18) month PS&E Design Phase, the web page will be updated quarterly. As the project moves into the Construction Phase, the web page will be updated monthly or on an as needed basis. As the construction starts on the project, it is imperative that the community is well informed ahead of time to help alleviate traffic impacts as well as traffic hazards. Updating the web page monthly will provide a current forum that the community can refer to for project details and roadwork updates.

Task 20.1 Deliverables: **Project Website**

Task 20.2 – Project Coordination

The Hoyt Company will provide public outreach strategic counsel and advise the project team about public involvement activities throughout the duration of the project. The Hoyt Company will attend one (1) team meeting during the PS&E Design Phase and two (2) team meetings during the Final Construction Phase of the project. This will give The Hoyt Company the opportunity to act as a liaison between the community and project team by flagging important community issues that will help to minimize traffic disruptions and maximize public support, thus assuring the community is well informed of the details of the project.

Task 20.2 Deliverables: **Identification and communication to County of community issues**



Task 20.3 – Mailing List

The Hoyt Company will utilize the existing mailing list database that was established during the Environmental Phase of the U.S. 50/Missouri Flat Road Interchange Project. Currently, the mailing list contains approximately 4,200 records that encompass key stakeholders, community groups, civic groups, neighborhood associations, business and planning professionals, transportation advocacy groups, environmental groups, elected officials, local, state and federal agencies, the media and various other individuals. The Hoyt Company will update the current mailing list to add additional property owners who are more localized and will be directly affected by the Construction Phase of the project. The Hoyt Company will continue to manage the mailing list database throughout the project to ensure its accuracy.

Task 20.3 Deliverables: Updated Mailing List

Task 20.4 – Project Newsletters (2)

The Hoyt Company will produce two (2) project newsletters to be distributed to the above-mentioned mailing list. For continuity and recognizability for the public who receives the newsletters, The Hoyt Company will utilize the same masthead design that was used in the previous project newsletters from the Environmental Document Phase of this Project. The newsletters will be two (2) color, 11 by 17 inches with an 8-1/2 by 11 inch insert (if needed), and will be distributed to up to 4,600 addresses.

The first newsletter will serve as a project update and introduction to the Design Phase and the second newsletter will provide a project update midway through the Design Phase of the project. Each newsletter will precede a Public Workshop and will provide an opportunity to announce the upcoming workshop and encourage public participation.

Task 20.4 Deliverables: Project Newsletters (2)

Task 20.5 – Public Workshops (2)

It is important to offer the public a forum to voice questions, concerns and issues relating to the U.S. 50/Missouri Flat Road Interchange Project. The Hoyt Company shall hold two (2) public workshops. One workshop will be held early during the PS&E Design Phase, and the second workshop will be held midway through the PS&E Design Phase to gain input from the community on potential design refinements. These workshops will create an informational, participant-convenient and interactive environment between County staff, Project staff and the community.

The Hoyt Company will be responsible for all event logistics including room rental, room set up and clean up, sign-in, nametags, refreshments, comment cards and written workshop summaries. In order to capture everyone's comments, participants will have the opportunity to fill out comment cards.

The Hoyt Company will take extra steps to ensure high attendance and participation at the public workshops by making personal reminder phone calls to the key stakeholders and the local media prior to the events. The Hoyt Company shall create, subject to the advice and approval of



County's Contract Administrator, or designee, two (2) press releases announcing the public meetings and the opportunity to get involved in the project. Subject to pre-approval from County's Contract Administrator, or designee, the Hoyt Company will be responsible for the text and distribution of the press releases and for coordination with the media.

Consultant shall prepare meeting agendas, handouts, exhibits and presentation materials for the meetings. Consultant's Project Manager and Project Engineer as well as one (1) staff person will attend these meetings. It is anticipated that Consultant's Project Manager will conduct the meeting with County providing input as needed.

Task 20.5 Deliverables: **Press Releases (2)**
 Public Meetings (2) #4 and #5

RIGHT-OF-WAY PHASE

Task 21.2 – RIGHT-OF-WAY ENGINEERING – DATA CONFIRMATION

Topographic Surveys, Inc. (TSI) will be responsible for confirming existing parcel and right-of-way identification for the collection of maps and record data relevant to the proposed project alignment. Data gathered shall include Assessor Parcel Maps, Record Survey Maps and Caltrans right-of-way maps.

TSI will conduct research and evaluate the gathered data, including survey control and right-of-way monumentation. The results of the data review will be presented in a report.

TSI Project Managers will monitor and direct work activities on this project in accordance with the contracted work scope, schedule and budget. Regular project meetings will be held to review work in progress.

Field research will be performed to identify existing parcel and right-of-way monumentation. The purpose is to pre-develop by record an operational field map for performing the required field survey ties.

TSI will provide or confirm a primary horizontal control network, throughout the project area, based upon Global Positioning Systems (GPS), precision geodetic network, on the State of California Coordinate System. Surveying accuracy will conform to the *Geometric Geodetic Accuracy Standards and Specifications for Global Positioning Surveys*, Caltrans, State of California.

The final number of monuments to be surveyed may increase or decrease depending on the field research. TSI will download the field survey data, and coordinated values will be established on all recovered land net corners. Based on the established coordinates, the mathematical relationship between found and computed record corners will be confirmed and accuracy



determined. Existing right-of-way, land net mapping will be mathematically established rigidly adjusted to California Coordinate System, Zone 2, NAD83 Datum.

It is TSI's understanding that the project will consist of twenty-six (26) Fee Takes and nine (9) Temporary Construction Easements on thirty (30) parcels, along with County and state right-of-way. County will provide title reports.

TSI will categorize the collected digital data in accordance with County/Caltrans CAD Standards.

Upon approval of the alignment or proposed right-of-way takes, TSI will perform calculations for preparing computer aided drafting of exhibit maps, showing assessor's parcel numbers, thirty (30) parcels, proposed right-of-way lines and easements.

An exhibit map prepared by TSI in County/Caltrans format and will be provided in electronic files.

Upon receipt of comments from Consultant and County, and prior to commencing map revisions, if required, TSI will confirm overall right-of-way and easement requirements for final maps. These maps will be submitted to Caltrans for review and approval.

TSI will prepare legal description and plats for each parcel requiring acquisition by fee, permanent easements and/or construction easements, in accordance with County and Caltrans real estate standards.

TSI will prepare a Record-of-Survey map, identifying all monuments found, set, in conflict and to be destroyed by the future construction. The Record-of-Survey will be prepared in accordance with State of California Subdivision Map Act and submitted to County for approval. Upon approval, a copy of the map will be forwarded to Caltrans, Real Estate Division for review to support the final right-of-way maps.

After County has completed the right-of-way negotiations, TSI will complete the changes to the draft acquisition plats and draft legal descriptions, and final right-of-way maps in Caltrans format will be prepared and submitted.

Final fee descriptions and plats will be prepared by TSI in Caltrans format and submitted. Hard copy and electronic copies of the deliverable documents will be submitted.

Task 21.2 Deliverables: Existing Right-of-Way Property Net Mapping
Right-of-Way Map Submittal to Caltrans
Plats and Legal Descriptions
Record of Survey Map

Task 22.4 – Acquisition Services

As an option, Bender Rosenthal Inc. (BRI), a listed subconsultant under this Agreement, is available to develop all necessary contracts, conveyance documents and escrow instructions necessary to make offers based on County's process. BRI will meet with the owners, convey

documents and process escrow instructions as necessary until acceptance or impasse is reached. Steps within the acquisition process are outlined below:

- Preparation of right-of-way contracts and other acquisition documents in cooperation with County;
- Meet with the property owners to discuss the project in general; review of maps and legal descriptions; confirm information about occupants/owners and make the official First Written Offer;
- Acquisition activities are based on settlement by the third contact. A recommendation to County will be made after *impasse* has been reached. To reach *impasse* there are three (3) requirements:
 - ♦ Go through the *acquisition steps* outlined below; plus
 - ♦ Make at least three (3) contacts with owner (personal call, letter or phone call) in any combination; plus
 - ♦ Spend at least eight (8) hours working on the parcel acquisition.

The acquisition steps when offering compensation to the property owner include:

- Owner accepts offer. (Close)
- Owner rejects offer.
 - ♦ Owner refuses to counter. (Impasse)
 - ♦ Owner makes counter proposal.
 - Client accepts counter. (Close)
 - Client rejects counter. (Impasse)
 - Client makes new offer.
- Owner accepts new offer. (Close)
- Owner does not accept new offer. (Impasse)
- Deliver signed right-of-way contract and signed and acknowledged grant deed for closed transaction. Deliver a memorandum explaining impasse or unclosed (i.e. impasse) calls.
- Submit final report, including transfer of all pertinent correspondence and files, to County.

Assumptions and Limiting Conditions

- Clearing title and exceptions are outside the scope of work.
- Escrow payments and escrow fees are to be borne directly by County.
- Assumes attendance by the Bender Rosenthal Manager at one Board of Supervisors meeting to be available for questions related to the appraisals.
- Expert witness testimony is not included within the work scope but is available.
- Eminent Domain Services is not included in this scope of work.

Task 22.4 Deliverables:

Acquisition of nine (9) Temporary Construction Easements
Acquisition of twenty-six (26) Fee Take Acquisitions



Task 22.5 – Relocation Assistance (RAP)

- Conduct personal, on site interviews of prospective displaced persons to ascertain relocation housing needs and special requirements including need for handicapped access or bilingual services (refer to assumptions below).
- Inform displaced persons of available relocation assistance and explain relocation process.
- Provide advisory assistance to displaced persons including referrals to community service resources.
- Physically assist displaced persons in locating replacement housing including transportation if needed.
- Provide referrals to replacement housing.
- Refer displaced persons to public housing and other public services as necessary, including but not limited to Section 8 housing.
- Distribute Relocation Assistance brochures, 90 and 30-Day Notices to Vacate and other notices as required. BRI can help develop the appropriate notices.
- Determine eligibility for and proposed amount of relocation benefits, including moving payments, rental/down payments assistance, and replacement housing payments.
- Inspect replacement dwellings to determine if they meet "decent, safe and sanitary" requirements.
- Monitor the move to replacement site, as necessary.
- Prepare necessary payment documentation and deliver benefit checks and other appropriate payments to claimants.
- Provide displaced persons with on going advisory services to minimize tenant hardship.
- Meet with County staff and/or consultants to coordinate relocation activities.
- Maintain current and accurate files and records of all contacts with each displaced person and include them in a Final Report formatted to facilitate Caltrans and FHWA audits.

Assumptions

- RAP will be required on up to four (4) parcels.
- No second moves or interim relocations.
- No storage cost of business inventory.
- Standard relocation limited to one tenant.

Task 22.5 Deliverables: Relocation Assistance Brochures; Notices to Vacate
Inspection Reports for Replacement Dwellings
Prepare and Submit for approval Payment Documentation
Final Report formatted to facilitate Caltrans & FHWA audits

Task 22.6 – Right-of-Way Certification

This task includes developing the right-of-way certification letter to Caltrans for Caltrans review and approval. If this optional task is not implemented by County, it is assumed that Right-of-Way certifications will be handled by County forces.

Task 22.6 Deliverables: Right-of-Way Certification



CONSTRUCTION SUPPORT PHASE

TASK 26 – PRE-CONSTRUCTION MEETING

Consultant shall attend the pre-construction meeting held between the Resident Engineer and the Contractor prior to the start of actual construction activities. Approximately 40 hours of effort have been provided for this task.

Task 26 Deliverable: Attendance at Pre-Construction Meeting

TASK 27 – REVIEW STRUCTURAL SHOP DRAWINGS

Consultant shall review all submittals and shop drawings. The review of shop drawings shall include bridge working drawing submittals, construction contractor's submittal for substitutions, construction contractor's alternative construction approval, steel layout for structures, and others as requested by the Resident Engineer. It is assumed that the independent check of construction contractor's falsework submittal and bar reinforcing details will be done by Caltrans. Approximately 180 hours of effort have been provided for this task.

Task 27 Deliverable: Structural Shop Drawings Review

TASK 28 – TECHNICAL SUPPORT ON CCOs

Consultant shall prepare drawings and review change orders requested by County, Caltrans, or the Resident Engineer. Approximately 154 hours of effort have been provided for this task.

Task 28 Deliverable: Technical Support on CCOs

TASK 29 – CONSTRUCTION SUPPORT AND OBSERVATION

Consultant shall respond to contractors' inquiries through Resident Engineer's request. In addition, Consultant will make field visits to the construction site to observe ongoing construction activities. The field visits will include discussion with the Resident Engineer to answer questions regarding the ongoing construction activities. Up to ten (10) site visits are provided for with approximately 189 hours for this task.

Task 29 Deliverables: 10 Site Visits During Construction to Support Resident Engineer

PROJECT CLOSEOUT PHASE

TASK 30 – FINALIZE PROJECT RECORDS/PREPARE AS-BUILTS

Consultant shall provide project records to County in accordance with the Caltrans Uniform Filing System, as required. In addition, Consultant will take the Resident Engineer's notes on the contract plans and change orders and prepare As-Builts for the project to be submitted to Caltrans. Approximately 470 hours of effort have been provided for this task.

Task 30 Deliverables: As-Built Plans and Project Records



TASK 31 – POST-CONSTRUCTION AUDITS

Consultant shall assist County with post-construction audits. Approximately 22 hours of effort have been provided for this task.

Task 31 Deliverables: Post-Construction Audit Support

Quincy Engineering, Incorporated
Exhibit C
Cost Proposal

U.S. Highway 50/Missouri Flat Road Interchange

Engineering & Environmental Planning, Design & Project Delivery Services

Part "A" Base Scope of Work

Project Budget

Direct Labor = Professional Service Hours X Agreed Hourly Rate = \$ 1,802,527

Professional services performed for the project as defined in Exhibit A hereto will be paid on an hourly basis at the agreed hourly rates for the specific Staff Classification for the given calendar year as identified on pages 7 through 9 of this Exhibit.

Subconsultants = Direct Subconsultant Cost + 8% Fee = \$ 753,121

Professional subconsultant services performed as defined in Exhibit A hereto will be paid at the invoice cost of services plus an administrative fee of 8%.

Mileage = Actual Direct Cost (estimate) = \$ 1,296

Mileage is an estimate only. Actual mileage expenses shall be paid in accordance with County's Travel Policy (No. D-1), Section 5b, attached hereto as Exhibit D, marked "Board of Supervisors Policy," incorporated herein and made by reference a part hereof.

Other Direct Costs = Applicable Direct Costs + 8% Fee = \$ 14,256

Other direct costs that are incurred by Consultant in the performance of services under this Agreement shall be paid for at the actual cost plus an administrative fee of eight percent (8%). Other direct costs shall include costs of materials and services which are directly required for the performance of services for this project as described in Exhibit A hereto.

Total Base Scope of Work Not-To-Exceed Amount = \$ 2,571,200

Total Base Scope of Work Not-To-Exceed Amount Rounded = \$ 2,572,000

The above stated Project Budget Amounts for Direct Labor, Subconsultant Payment, Mileage and Other Direct Costs are provided as the basis for the establishment of the Total Not-To-Exceed Amount and for use in evaluating progress pay applications and determination of reasonable and appropriate costs for individual items of work. Payment for services shall be determined in accordance with this Agreement and methods listed above; however, the amounts of individual elements may vary. In no event shall the total amount paid for all services identified in Exhibit A hereto exceed the Total Not-To-Exceed Amount. Payment amounts accrued up to or in excess of the Total Not-To-Exceed Amount shall not relieve Consultant of the responsibility of completing all tasks included in Exhibit A and no additional compensation shall be made in excess of the Total Not-To-Exceed Amount specified above.

Quincy Engineering, Incorporated
Exhibit C
Cost Proposal

U.S. Highway 50/Missouri Flat Road Interchange

*Engineering & Environmental Planning, Design & Project Delivery Services
Base Budget, Not Including Optional Tasks*

Part "A" Base Scope of Work

	<u>Quincy Engineering Labor</u>	\$1,755,138.00
	Direct Labor:	\$47,388.73
	Labor Escalation (2.7%)	<u>\$1,802,526.73</u>
A.	QEI Labor Subtotal:	
	 <u>Subconsultant Costs:</u>	
	Taber Consultants	\$217,950.00
	Fehr & Peers	\$168,300.00
	Topographical Surveys, Inc.	\$118,410.00
	Value Management Strategies	\$29,920.00
	Bender Rosenthal	\$126,600.00
	WRECO	<u>\$36,154.00</u>
B.	Subconsultant Subtotal:	\$697,334.00
C.	*Mileage:	\$1,296.00
	 <u>Other Direct Costs:</u>	
	Phone/Fax	\$200.00
	Delivery	\$1,500.00
	Printing: Blue Line	\$0.00
	Vellum	\$1,000.00
	8-1/2 X 11 Reproduction	\$2,000.00
	11 X 17 Reproduction	\$3,000.00
	Mounting Boards for Presentations	\$500.00
	Miscellaneous	<u>\$5,000.00</u>
D.	Direct Cost Subtotal:	\$13,200.00
	 QEI Labor	\$1,802,526.73
	*Mileage	\$1,296.00
	Subconsultants & Other Direct Costs	\$697,334.00
	Other Direct Costs	\$13,200.00
	Fee (8.0%) on Subconsultants & Other Direct Costs:	<u>\$56,842.72</u>
	 Total Proposed Base Budget Cost Estimate	<u>\$2,571,199.45</u>
	TOTAL PROPOSED BASE BUDGET COST ESTIMATE	<u>\$2,572,000 (Rounded)</u>

Note: Invoices will be based upon QEI Agreed hourly rates for each Calendar Year. Actual subconsultant and other direct costs will be invoiced at cost plus 8% fee.

*Mileage is an estimate only. Actual mileage expenses shall be paid in accordance with County's Travel Policy (No. D-1), Section 5b, attached hereto as Exhibit D, marked "Board of Supervisors Policy," incorporated herein and made by reference a part hereof.

Quincy Engineering, Incorporated
Exhibit C
Cost Proposal

U.S. Highway 50/Missouri Flat Road Interchange

Engineering & Environmental Planning, Design & Project Delivery Services

Part "B" Optional Tasks Scope of Work

Project Budget

Direct Labor = Professional Service Hours X Agreed Hourly Rate = \$ 302,767

Professional services performed for the project as defined in Exhibit B hereto will be paid on an hourly basis at the agreed hourly rates for the specific Staff Classification for the given calendar year as identified on pages 7 through 9 of this Exhibit.

Subconsultants = Direct Subconsultant Cost + 8% Fee = \$ 621,986

Professional subconsultant services performed as defined in Exhibit B hereto will be paid at the invoice cost of services plus an administrative fee of 8%)

Total Optional Tasks Not-To-Exceed Amount = \$ 924,753

Total Optional Tasks Not-To-Exceed Amount (Rounded) = \$ 925,000

Quincy Engineering, Incorporated
Exhibit C
Cost Proposal

U.S. Highway 50/Missouri Flat Road Interchange

Engineering & Environmental Planning, Design & Project Delivery Services
Optional Tasks, Not Included in Base Budget

Part "B" Optional Tasks Scope of Work

<u>Quincy Engineering, Inc.</u>		
	Direct Labor:	\$281,644
	Labor Escalation (7.5%)	<u>21,123</u>
A.	QEI Labor Subtotal:	\$302,767
<u>Subconsultant Costs:</u>		
	Jones and Stokes	\$274,362
	Taber Consultants	\$47,355
	Fehr & Peers	\$24,734
	The Hoyt Company	\$52,118
	Topographical Surveys, Inc.	\$81,941
	Subtronic Corporation	\$9,768
	Bender Rosenthal	\$85,635
	Subconsultant Subtotal:	<u>\$575,913</u>
	Fee on Subconsultants (8%)	<u>\$46,073</u>
B.	Subconsultant Subtotal:	\$621,986
	QEI Labor	\$302,767
	Subconsultants (Including 8% Fee)	<u>\$621,986</u>
	Total Proposed Optional Tasks Cost Estimate	<u><u>\$924,753</u></u>
TOTAL PROPOSED OPTIONAL TASKS COST ESTIMATE		<u><u>\$925,000 (Rounded)</u></u>

Note: Invoices will be based upon QEI Agreed hourly rates for each Calendar Year. Actual subconsultant and other direct costs will be invoiced at cost plus 8% fee.

Quincy Engineering, Incorporated
Exhibit C
Cost Proposal

2005 Rate Schedule

Rates are effective January 1, 2005 through December 31, 2005

Key Staff	Agreed Hourly Rate*
John Quincy, Principal in Charge	\$170
Alan Glen, Principal Engineer, Project Manager	\$170
Keith Rhodes, Senior Engineer, Roadway Project Engineer	\$135
Jim Foster, Senior Engineer, Bridge Project Engineer	\$145
Mario Quest, Senior Bridge Engineer	\$145
Mark Reno, Senior Engineer, QA/QC	\$145
Kerry Theron, Senior Construction Engineer	\$145

General Classifications	Agreed Hourly Rate *
Principal Engineer	\$170
Senior Engineer	\$145
Associate Engineer	\$115
Assistant Engineer	\$78
CADD Draftsman III	\$103
CADD Draftsman II	\$83
CADD Draftsman I	\$57
Administrative Assistant	\$83
Office Support Staff	\$62

*** Includes Overhead and Fee**

Mileage **Per Exhibit D**

<u>Other Direct Costs</u>	<u>Rate</u>
Office Computer & Software	Included in Overhead
Phone/Fax	Included in Overhead
Reproduction (vendor)	Cost
Delivery	Cost
Subconsultants	Cost
Misc.	Cost

Administrative Fee
Subconsultant and other Direct Costs 8%

Quincy Engineering, Incorporated
Exhibit C
Cost Proposal

2006 Rate Schedule

Rates are effective January 1, 2006 through December 31, 2006

Key Staff	Agreed Hourly Rate*
John Quincy, Principal in Charge	\$176
Alan Glen, Principal Engineer, Project Manager	\$176
Keith Rhodes, Senior Engineer, Roadway Project Engineer	\$139
Jim Foster, Senior Engineer, Bridge Project Engineer	\$149
Mario Quest, Senior Bridge Engineer	\$149
Mark Reno, Senior Engineer, QA/QC	\$149
Kerry Theron, Senior Construction Engineer	\$149

General Classifications	Agreed Hourly Rate *
Principal Engineer	\$176
Senior Engineer	\$149
Associate Engineer	\$119
Assistant Engineer	\$81
CADD Draftsman III	\$107
CADD Draftsman II	\$85
CADD Draftsman I	\$59
Administrative Assistant	\$85
Office Support Staff	\$64

*** Includes Overhead and Fee**

Mileage **Per Exhibit D**

Other Direct Costs	Rate
Office Computer & Software	Included in Overhead
Phone/Fax	Included in Overhead
Reproduction (vendor)	Cost
Delivery	Cost
Subconsultants	Cost
Misc.	Cost

Administrative Fee

Subconsultant and other Direct Costs	8%
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Quincy Engineering, Incorporated
Exhibit C
Cost Proposal

2007 Rate Schedule

Rates are effective January 1, 2007 through December 31, 2007

Key Staff	Agreed Hourly Rate*
John Quincy, Principal in Charge	\$182
Alan Glen, Principal Engineer, Project Manager	\$182
Keith Rhodes, Senior Engineer, Roadway Project Engineer	\$144
Jim Foster, Senior Engineer, Bridge Project Engineer	\$154
Mario Quest, Senior Bridge Engineer	\$154
Mark Reno, Senior Engineer, QA/QC	\$154
Kerry Theron, Senior Construction Engineer	\$154

General Classifications	Agreed Hourly Rate *
Principal Engineer	\$182
Senior Engineer	\$154
Associate Engineer	\$123
Assistant Engineer	\$84
CADD Draftsman III	\$110
CADD Draftsman II	\$88
CADD Draftsman I	\$61
Administrative Assistant	\$88
Office Support Staff	\$66

*** Includes Overhead and Fee**

Mileage **Per Exhibit D**

Other Direct Costs	Rate
Office Computer & Software	Included in Overhead
Phone/Fax	Included in Overhead
Reproduction (vendor)	Cost
Delivery	Cost
Subconsultants	Cost
Misc.	Cost

Administrative Fee

Subconsultant and other Direct Costs 8%

Quincy Engineering, Incorporated
Exhibit C
Cost Proposal

2008 Rate Schedule

Rates are effective January 1, 2008 through December 31, 2008

Key Staff	Agreed Hourly Rate*
John Quincy, Principal in Charge	\$189
Alan Glen, Principal Engineer, Project Manager	\$189
Keith Rhodes, Senior Engineer, Roadway Project Engineer	\$150
Jim Foster, Senior Engineer, Bridge Project Engineer	\$161
Mario Quest, Senior Bridge Engineer	\$161
Mark Reno, Senior Engineer, QA/QC	\$161
Kerry Theron, Senior Construction Engineer	\$161

General Classifications	Agreed Hourly Rate *
Principal Engineer	\$189
Senior Engineer	\$161
Associate Engineer	\$128
Assistant Engineer	\$87
CADD Draftsman III	\$114
CADD Draftsman II	\$92
CADD Draftsman I	\$63
Administrative Assistant	\$92
Office Support Staff	\$69

*** Includes Overhead and Fee**

Mileage **Per Exhibit D**

<u>Other Direct Costs</u>	<u>Rate</u>
Office Computer & Software	Included in Overhead
Phone/Fax	Included in Overhead
Reproduction (vendor)	Cost
Delivery	Cost
Subconsultants	Cost
Misc.	Cost

Administrative Fee
Subconsultant and other Direct Costs 8%

Quincy Engineering, Incorporated
Exhibit C
Cost Proposal

2009 Rate Schedule

Rates are effective January 1, 2008 through December 31, 2008

Rates for 2009 will be determined by applying the then current California Consumer Price Index to the 2008 Rate Schedule.

Key Staff

Agreed Hourly Rate*

John Quincy, Principal in Charge

Alan Glen, Principal Engineer, Project Manager

Keith Rhodes, Senior Engineer, Roadway Project Engineer

Jim Foster, Senior Engineer, Bridge Project Engineer

Mario Quest, Senior Bridge Engineer

Mark Reno, Senior Engineer, QA/QC

Kerry Theron, Senior Construction Engineer

General Classifications

Agreed Hourly Rate *

Principal Engineer

Senior Engineer

Associate Engineer

Assistant Engineer

CADD Draftsman III

CADD Draftsman II

CADD Draftsman I

Administrative Assistant

Office Support Staff

*** Includes Overhead and Fee**

Mileage **Per Exhibit D**

Other Direct Costs	Rate
Office Computer & Software	Included in Overhead
Phone/Fax	Included in Overhead
Reproduction (vendor)	Cost
Delivery	Cost
Subconsultants	Cost
Misc.	Cost

Administrative Fee

Subconsultant and other Direct Costs 8%

Quincy Engineering, Incorporated
Exhibit C
Cost Proposal

2010 Rate Schedule

Rates are effective January 1, 2008 through December 31, 2008

Rates for 2010 will be determined by applying the then current California Consumer Price Index to the 2009 Rate Schedule.

Key Staff	Agreed Hourly Rate*
<hr/>	
John Quincy, Principal in Charge	
Alan Glen, Principal Engineer, Project Manager	
Keith Rhodes, Senior Engineer, Roadway Project Engineer	
Jim Foster, Senior Engineer, Bridge Project Engineer	
Mario Quest, Senior Bridge Engineer	
Mark Reno, Senior Engineer, QA/QC	
Kerry Theron, Senior Construction Engineer	

General Classifications	Agreed Hourly Rate *
<hr/>	
Principal Engineer	
Senior Engineer	
Associate Engineer	
Assistant Engineer	
CADD Draftsman III	
CADD Draftsman II	
CADD Draftsman I	
Administrative Assistant	
Office Support Staff	

*** Includes Overhead and Fee**

Mileage	Per Exhibit D
<hr/>	
Other Direct Costs	Rate
<hr/>	
Office Computer & Software	Included in Overhead
Phone/Fax	Included in Overhead
Reproduction (vendor)	Cost
Delivery	Cost
Subconsultants	Cost
Misc.	Cost

Administrative Fee	
<hr/>	
Subconsultant and other Direct Costs	8%

Quincy Engineering, Incorporated

Exhibit D

Board of Supervisors Policy

The following excerpt of the Board of Supervisors' Travel Policy, written for County employees, shall apply to Consultant under the terms of this Agreement:

Subject: Travel

Policy Number: D-1

Date Adopted: 12/22/87

Revised: 5/25/99

§5. Reimbursement Rates:

b. Private Auto

Travel by private auto in the performance of "official County business" shall be reimbursed at the Federal rate as determined by the Internal Revenue Service.

Mileage for travel shall be computed from the employee's designated work place. If travel begins from the employee's residence, mileage shall be calculated from the residence or work place, whichever is less. (For example, an employee who lives in Cameron Park and drives to a meeting in Sacramento, leaving from the residence will be paid for mileage from the residence to Sacramento and back to the residence.)

The mileage reimbursement rate represents full reimbursement, excluding snow chain installation and removal fee, for expenses incurred by a County officer or employee (e.g., fuel, normal wear and tear, insurance, etc.) during the use of a personal vehicle in the course of service to El Dorado County.